

# CAREER DEVELOPMENT HANDBOOK

2009-2010



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# Introduction to the Career Development Center

The Career Development Center is a part of the Global Education and Career Development Center (GECD) at the Massachusetts Institute of Technology (MIT). Our partner office at the GECD is the Global Education Office.

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## MISSION STATEMENT

The Global Education and Career Development Center empowers MIT students and alumni to achieve lifelong success through seamless access to transformative global experiences, comprehensive and holistic career services and mutually beneficial connections with employers and graduate schools.

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## Programs Overview

To take advantage of our services and learn about upcoming events, please visit us in 12-170, call our front desk (617-253-4733) or email us at [mitco@mit.edu](mailto:mitco@mit.edu). Also, be sure to visit our website (<http://careers.mit.edu>) for current information on events and services.

Our resources include career assessment, online career research tools, Employer Business Card Directory, information sessions and workshops, fall and spring on-campus recruiting, counseling appointments, study abroad and distinguished fellowships advising, preprofessional advising, career panels, study abroad and career fairs, symposia and other networking opportunities. During the academic year, we hold Walk-in Hours daily. Please see our website for our Walk-ins schedule: <http://web.mit.edu/career/www/services/walkins.html>.

On a recurring basis throughout the academic year, the MIT Career Development Center presents career workshops. Many are tailored to the specific needs of undergraduates, graduate students, international students and preprofessional applicants. Current workshops are listed at <http://web.mit.edu/career/www/services/workshops.html>. Online pre-registration is required. Topics include but are not limited to:

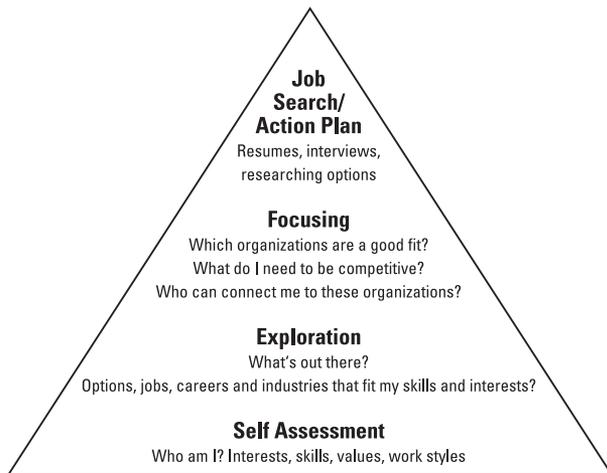
Self-Assessment	Job and Internship Search
Networking	Researching Companies
Resumes, Cover Letters, and CVs	Negotiating Job Offers
Interview Techniques	Applying to Graduate School

# Chapter 2.

# Career Development Process

## Career Development Pyramid

### THE JOB SEARCH PROCESS



Adapted from Peter Fiske: *To Boldly Go: Practice Career Advice for Scientists*, Workshop at MIT, April 1998  
Modified from Stanford University Career Planning and Placement Office

The pyramid above presents a model for how to conduct a successful job search, where “successful” refers to getting a job that is genuinely a good fit for you. Although the process is actually dynamic and there is movement back and forth among the different stages, the model suggests that a successful job search encompasses four basic steps. It begins with Self-Assessment—knowing who you are and what you want, moves on to Exploration of what’s out there in terms of interesting industries and occupations, progresses to Focusing on specific industries and companies that appeal to you, and then culminates in the nuts-and-bolts Job Search stage, involving sending out resumes, interviewing, and negotiating job offers.

You might find it helpful to look through the following questionnaire, *Testing Your Career Fitness*. You can use this as a checklist to see how ready you currently are to conduct a successful job search, and as a guide to help you effectively and confidently prepare for your job search.

## Testing Your Career Fitness

### Self-Knowledge

1. I know what motivates me to excel.
2. I can identify my strongest abilities and skills.
3. I have several major achievements that clarify a pattern of interests and abilities.
4. I know what I both like and dislike in work.
5. I have some ideas about what I want to do during the next [two to three] years.
6. I can list my major accomplishments in action terms.

### Knowledge of Employers

7. I know what skills I can offer employers in different occupations.
8. I can clearly explain to employers what I do well and enjoy doing.
9. I can specify why an employer should hire me.
10. When I’m ready to find an internship or job, I will be able to identify and target potential employers.

### Internship or Job Search Skills/Contacts

11. I can conduct research on different occupations, employers, organizations and communities.
12. I can write different types of effective resumes, internship search letters, and thank-you notes.
13. I can produce and distribute resumes and letters to the right people.
14. I can develop a job referral network.
15. I can prospect for internship or job leads.

Adapted from Jobtrak Job Search Tips where it was reprinted with permission from *Change Your Job, Change Your Life* by Dr. Ronald L. Krannich, T 1995, Impact Publications.

## ▲ Self Assessment △

At the base of our model pyramid, providing the essential foundation for the rest of the job search, is self-assessment, or knowing yourself. Thoughtful self-assessment streamlines the remaining steps of the job search, helping you to focus on organizations and careers compatible with your goals, and enabling you to market yourself knowledgeably and confidently. Three aspects that are important to consider when choosing a career are: interests, values, and skills. Being able to clearly articulate these on a resume and during an interview will promote a good fit with potential employers.

The Career Development Center offers specific self-assessment inventories such as the Myers Briggs Type Indicator (MBTI) and Strong Interest Inventory to students during counseling appointments, if both student and counselor think it's appropriate.

### Interests

Our interest in the work we do is a key motivating factor for work. If we are interested in our work, we will find it more enjoyable, be more motivated to learn about it, develop relevant skills, work hard, and persist through difficult challenges, all of which increase our chances of success and job satisfaction.

What are your interests? Think broadly when you answer this question—include work, academics, volunteer and leisure interests. Consider subject areas as well as activities. For example, subjects might include biology, architecture, and economics, while activities could be research, design, and consulting.

Below is a list of questions that may help you identify some of your interests.

1. What do you love to do?
2. What books do you browse through in bookstores?
3. Which are your favorite courses?
4. If you won the lottery, to which causes/issues would you give money?
5. If you were a reporter, what kind of stories would you like to write?
6. What are your favorite objects?
7. What sorts of information do you find most fascinating?
8. Who are your heroes?
9. What did you dream of being when you were 10?

### Values

Values are ideals and core beliefs that are important to us; they give meaning and purpose to what we do. We are most

likely to be comfortable and thrive in work that is compatible with our own strongly held values. On the other hand, difficulties may arise when we find ourselves in conflict with a work situation because it clashes with our values. Consider the following values as they relate to work. Which ones are most important to you? Least important? Which are very deep and clear? Which are more ambiguous? How do your values impact your career direction and work decisions?

- |  |  |
|--|--|
| <input type="checkbox"/> Achievement           | <input type="checkbox"/> Inner Harmony     |
| <input type="checkbox"/> Advancement           | <input type="checkbox"/> Job Security      |
| <input type="checkbox"/> Adventure             | <input type="checkbox"/> Leadership        |
| <input type="checkbox"/> Balance: Work/Family  | <input type="checkbox"/> Leisure           |
| <input type="checkbox"/> Challenge             | <input type="checkbox"/> Location          |
| <input type="checkbox"/> Competition           | <input type="checkbox"/> Personal Growth   |
| <input type="checkbox"/> Contribute to Society | <input type="checkbox"/> Physical Activity |
| <input type="checkbox"/> Creativity            | <input type="checkbox"/> Pleasure          |
| <input type="checkbox"/> Expertise             | <input type="checkbox"/> Precision         |
| <input type="checkbox"/> Flexibility           | <input type="checkbox"/> Recognition       |
| <input type="checkbox"/> Friendship            | <input type="checkbox"/> Responsibility    |
| <input type="checkbox"/> Helping Others        | <input type="checkbox"/> Stability         |
| <input type="checkbox"/> High Salary           | <input type="checkbox"/> Variety           |
| <input type="checkbox"/> Independence          |  |

### Skills

Skills are learned abilities—things we do well. Most students have far more skills than they realize, since they tend to take many of their skills for granted. Do you know what your skills are? Which skills do you like to use? Just because we can do something well doesn't mean that we enjoy doing it. Can you communicate your skills effectively to potential employers?

It is helpful to think of two types of skills. Here are a few exercises to help you identify both types.

- 1) Knowledge-based skills are acquired through education, training and on-the-job experience, e.g., you may be knowledgeable about quasars or JAVA or the plays of George Bernard Shaw. To think about your knowledge-based skills, ask yourself what subject areas do you know a lot about? Consider academic, work and vocational activities. Which do you enjoy?
- 2) Transferable skills are actions that can be carried out in different knowledge areas, e.g., writing, data entry and project management. Employers especially want to know what your transferable skills are. To think about your transferable skills, look at the list of action verbs on Page 20. These verbs describe skills. How many do you have? Which do you like to use? Which would you like to develop? Are there others not on the list?

Once you have evaluated your interests, values, and skills, how do you put all that information together? Your interests and values will likely point you to certain industries, companies or job functions. Knowledge of your skills will help you determine if those industries, organizations, and job opportunities are likely to offer you work you can skillfully do or learn to do and will enjoy doing.

Self-assessment is a lifelong practice, one that most people will return to again and again over the course of their professional careers. As you gain work experience and your skills grow, your interests and values are likely to shift. You can return to this pyramid to help you move confidently into new areas of work and career.

#### **Additional resources on self-assessment:**

- MIT Career Development Center, Self-Assessment Workshop: <http://web.mit.edu/career/www/workshops/finding>
- University of Waterloo online Career Development Manual, Self-Assessment: [www.cdm.uwaterloo.ca](http://www.cdm.uwaterloo.ca)
- John Holland's Self-Directed Search online: [www.self-directed-search.com](http://www.self-directed-search.com)
- Career Zone: general interests and related jobs (Holland categories): [www.nycareerzone.org/graphic/assessment/index.jsp](http://www.nycareerzone.org/graphic/assessment/index.jsp)
- Spencer Stuart Organizational Culture Match Test: <http://www.spencerstuart.com/yourcareer/resources/services/730>
- [www.masscis.intocareers.com](http://www.masscis.intocareers.com) For descriptions of various occupations, their tasks, requirements, skills needed
- <http://careers.mit.edu/www/infostats/resources.html> has a comprehensive list of links to a wide range of career resources

### **Career Development Timelines**

For tips on how to manage your professional development at each stage of your degree program, use the timeline below (if you are an undergraduate) or see *Masters, Doctoral and Postdoc versions* at <http://web.mit.edu/career/www/graduate/timelines.html>.

#### **Freshman Year**

**Adjusting ... Get to know yourself. Explore your academic and extracurricular interests and your future goals.**

#### **Academics**

- Test your interests through coursework, UROPs, volunteer jobs, and student activities.

- Meet your professors. Learn how to build your network by taking advantage of their office hours. Get to know at least one professor well every year.
- Identify four to seven career fields that interest you and research how academic training supports those careers. Meet with a Career Counselor to discuss majors as they relate to careers. Read up on the careers that interest you. Arrange informational interviews with alumni working in those fields, <http://alum.mit.edu/benefits/CareerGuidance/ICAN>.
- Attend the Choice of Major Fair in the fall. Freshmen are expected to pick a major in April, but you may remain "Undecided" until sophomore year.

### **Career Decision Making**

- Start a Career Log to record your thoughts on academic coursework, future goals, and careers. Create a "college accomplishments" section to record courses taken, extracurricular and volunteer activities, honors/awards, internships, and jobs. Update your Career Log throughout your college career. This log can be used to create a resume and will be helpful when you look for a summer job.
- Explore the services CDC offers such as career workshops, resume critiques, and mock interviews.
- Meet with a Career Counselor to help identify your interests, skills and values.
- Talk to a career counselor about a summer job or internship in an area that interests you. Consider a summer UROP.
- Develop a resume to use both on- and off-campus.
- Sign up to become a registered user of CareerBridge, see: <https://www.myinterfase.com/mit/student>.

### **Extracurricular Involvement**

- Get involved in dorm activities, student organizations, or public service projects. Explore social and academic clubs that interest you. Join at least one extracurricular activity.
- Ask for help if you need it! That is what Resident Assistants, Freshman Advisors, Teaching Assistants, and Counselors are for!

### **Sophomore Year**

**Exploring ... Explore occupations that interest you. Research and network career possibilities.**

#### **Academics**

- Confirm your choice of major. Explore a second major or minor if interested.
- Get involved with your advisor and your department. Schedule at least two meetings per semester with your advisor. Use the time to learn about his/her field and explore your interests in that field. Find out what activities and services are offered to undergraduates in your department.

- Electives can give you the opportunity to explore a second major or minor as well as to develop a personal interest. Consider targeting your electives to make you more versatile and employable.
- Explore opportunities for research, UROPs, and creative projects.
- If interested in studying abroad, begin to research your options. To meet with Global Education advisors see: <http://web.mit.edu/goglobal>.
- Learn about Distinguished Fellowship and Scholarship opportunities available to students in various fields. To meet with our Fellowships advisor see: <http://web.mit.edu/scholarships>.

## Career Decision Making

- Update your resume and post it on CareerBridge.
- Attend career and internship fairs to gather information on different industries and companies, <http://web.mit.edu/career/www/events/careerfairs.html>.
- Attend workshops and programs sponsored by CDC to build your career management skills, <http://web.mit.edu/career/www/events/workshops.html>.
- Explore opportunities to gain relevant work experience, for example: internships, externships, UROPs and summer jobs.
- Learn how to build your network and cultivate mentors. Conduct informational interviews with people in fields that interest you and record notes in your Career Log. Keep track of contacts!
- Update your Career Log.

## Extracurricular Involvement

- Attend meetings of student professional organizations. Get involved! This will help you gain skills including teamwork and public speaking.
- Act on your interests. Take an active role in an extracurricular activity and explore new ones. Consider assuming a leadership role in your dorm, campus organization, or on a class project.
- Volunteer.

## Junior Year

**Experiencing... Get experience through internships and summer jobs. Prioritize your interests. Draft your job search or graduate school strategy.**

## Academics

- Choose electives that enhance your learning and career goals.
- If you have not yet done a UROP, seriously consider doing one now, to develop skills and help you explore areas of interest.
- Explore options and desires to attend graduate or professional school. Consider one to three years of work experience first to enhance learning.
- Meet with an advisor before spring to discuss graduate school admissions and testing processes.

- Continue developing relationships with faculty, graduate students, and professionals. Identify who will serve as references for graduate school or employment.
- Apply to Distinguished Fellowships and Scholarships if appropriate for you. See <http://web.mit.edu/scholarships>.

## Career Decision Making

- Meet with a Career Counselor to create a job or graduate school search strategy. Also discuss with a counselor effective ways to use web-based job and internship services.
- Update your Career Log. Use your Career Log entries to help you prioritize career choices.
- Post an updated resume on CareerBridge.
- Devote a significant amount of time to finding a summer job or internship or UROP in a field related to your future career goals.
- Practice networking while getting career information at company presentations, career fairs, career related events/forums, and talking to alums. Keep in touch with previous teachers and advisors.
- Arrange a mock interview at CDC to practice interviewing skills.
- Shop for business attire so you can “dress for success” in interviews.

## Extracurricular Involvement

- Send for career materials from professional associations and consider joining one as a student member.
- Continue to explore your values, interests, and skills through involvement with clubs, student organizations, and volunteer activities.

## Senior Year

**Transitioning... Develop skills you need to accomplish your goals and thrive in life after MIT.**

## Academics

- If you are planning to attend graduate or professional school, gather all application forms and write a statement of purpose.
- Make sure to keep up your grades. Graduate schools and some employers may want to see your final semester grades.

## Career Decision Making

- Visit CDC early in the fall semester to sharpen your job search skills and to take advantage of on-campus recruiting.
- Talk with professionals in your field about job search techniques and opportunities.
- Network with parents, friends, faculty, alumni, and others. Most jobs are found through networking.
- Tailor your resume to each position for which you are applying and write compelling cover letters. Visit CDC and have your resume and cover letters critiqued.

- ❑ Identify three references and ask permission to use their names.
- ❑ Prepare for interviews by attending an Interview Workshop and doing a mock interview at CDC.
- ❑ Read relevant periodicals and trade journals to understand current issues in your field. Having this insight makes a huge difference during interviews.
- ❑ Analyze job offers based upon the goals and values that you documented in your Career Log. Visit CDC where a Career Counselor can help you walk through this decision.
- ❑ Let the CDC know what you are up to for next year by completing the Graduating Student Survey.

### Extracurricular Involvement

- ❑ Think about your first year after graduation; your ideal work, proximity to family and friends, lifestyle, values, and long-term goals. It may help to talk about these things with your friends and people whose opinions you value.
- ❑ Start thinking about practical life after MIT. Project your needs and create a realistic budget. Attend seminars regarding finances, work/life balance, managing stress, office politics, etc.
- ❑ Enjoy the end of your senior year and graduation. Congratulations!

- Websites, for example: [www.collegegrad.com/careers/all.shtml](http://www.collegegrad.com/careers/all.shtml)
- Newspapers and magazines
- Trade magazines and newsletters
- Career books and career websites

- 2) Notice the jobs around you, especially those done by family, friends, acquaintances and others. Ask people about:
  - Their career path
  - How they feel about their work
  - What tips and advice do they have to offer
- 3) Browse the MIT Alumni Directory on: <http://alum.mit.edu> and ICAN website:
  - What are alumni from your major doing?
  - From other majors?
  - Who are they working for?
- 4) Talk to business/industry people:
  - Talk with your advisor and faculty about opportunities for people with your academic training
  - Attend student association events sponsored by various departments
  - Take part in career fairs
  - Conduct informational interviews with people in occupations and organizations that interest you

### ▲ Exploring Your Options: Knowing What's Out There △

Here are some suggestions for how you can learn about the enormous range of industries and occupations available to you. Think expansively and creatively!

- 1) Read about industries, organizations, occupations in:
  - Occupational Outlook Handbook: [www.bls.gov/oco](http://www.bls.gov/oco)
  - O\*Net Online: <http://online.onetcenter.org>
  - WetFeet Career Guides (available through CareerBridge) <https://www.myinterfase.com/mit/student>

### ▲ Focusing— Job Search Strategies △

Focus on some industries and occupations that appeal to you, and research them in greater depth.

Researching organizations that interest you helps you decide which companies might offer a good fit for your occupational goals and interests. In addition, it is essential preparation prior to interviewing effectively with a company. For an in-depth discussion on how to research a company see [www.learnwebskills.com/company/index.html](http://www.learnwebskills.com/company/index.html).

### How 2008 MIT Graduates Found Their Jobs

	Undergrad	Masters	Doctoral
On-campus recruiting	43.8%	37.6%	19.7%
Networking	27.4%	28.9%	33.1%
Internship led to job offer	28.3%	14.9%	1.6%
Career fair	24.7%	15.7%	7.1%
Professional conference	.5%	1.7%	8.7%
Contacts acquired through MIT Career Development Center	.9%	3.7%	2.4%
Through department (faculty, academic administrator)	5.9%	7.9%	22.8%
Directly applied to employer	22.4%	16.9%	36.2%
Advertised job listing (online, print)	5.5%	2.9%	18.9%
Other	10.0%	16.5%	10.2%

### What you should know about a company:

- Size of organization (comparison to other companies in industry)
- Number of years in business, history of organization
- Geographical locations, corporate headquarters
- Products and services, clientele
- Age and background of top management
- Values, company culture
- Organizational structure, climate
- Current financial condition
- Annual sales growth for past five years
- Competition
- Reputation
- Future outlook
- News stories about company, any new developments, trends

### Where can you learn about companies and organizations?

- Company websites
- Annual reports: contact companies for copies of these
- Trade associations: print and web materials
- News articles about companies and executives: newspapers, journals (use online search engines, e.g., [www.google.com](http://www.google.com))
- Online references: e.g., WetFeet Career Guides, available through CareerBridge
- Directories: e.g., CorpTech, Standard & Poor's Corporation Records
- Talk to employees: network, MIT alumni directory

### Researching Companies

You are able to find many helpful details you need about a company by using the various MIT libraries and online resources at <http://libraries.mit.edu> and <http://libguides.mit.edu/companies>. MIT Libraries offers "career research workshops" to introduce you to electronic and print resources for researching companies, organizations and agencies as potential employers.

You can access business databases and directories for specialized industry and economic research by going to the MIT Libraries' Vera service at <http://libraries.mit.edu/vera>. There, from the List by Subject menu, select "Business & Management." These databases provide detailed information about a company's investment status, management, products and markets. You can also use the databases to generate lists of leads.

### Sample of listings:

- ABI/INFORM Global
- Bloomberg
- Business Source Elite
- Corptech
- Hoovers Online
- I/B/E/S
- InfoTech Trends
- Investext Plus
- ISI Emerging Markets

- Jupiter Communications
- LexisNexis Academic
- Morningstar Principia Pro Plus
- Reference USA
- Reuters
- Reuters Business Insight
- SDC Platinum
- TAQ
- Thomson Research
- VentureXpert Web
- Yankee Group Reports

For a video tutorial on how to use these databases, see <http://libraries.mit.edu/tutorials/video/index.html>.

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## ▲ Job Search Action Plan △

Once you have completed your self-assessment, explored different industries and fields, and narrowed your search to a few target industries and companies, you are ready to enter the final stage of the job search—identifying and applying for jobs. Below are some tips for how to go about finding job opportunities. Three job search methods are described: Traditional, Using the Hidden Job Market, and Networking.

### Traditional Job Search

You can apply for advertised job vacancies by checking out the following locations.

- CareerBridge—on-campus recruiting: <https://www.myinterfase.com/mit/student>
- Newspapers, journals, publications
- Company websites
- Internet jobsites, bulletin boards—e.g., <http://www.Medzilla.com>, a pharmaceutical industry site, and <http://www.ieee.org>, the electrical engineering association's website
- Listservs
- Notices from MIT Department Administrators
- Employment agencies
- Head hunters

### Hidden Job Market

Many positions are never advertised so how can you find out about them?

**Target employers that interest you and identify someone who works for each, talk to him/her about the company, your interests and jobs.**

- Do any MIT alumni/ae work for the company?
- Talk to people in your network—does anyone know anyone who works for the company?
- Research to identify the name of someone you can contact
  - Company/organization website
  - Directories

- Company Annual Reports
- News articles—search <http://www.google.com>

### Approach the employer

- Conduct informational interviews and network
- Ask for names of people you might talk with in areas of the company that particularly interest you
- Send a letter of inquiry to a company even if you do not know of an advertised position

### Networking

Networking is the most effective method of finding a job. It involves talking to as many people as possible about your job search. Networking is expanding your network of professional associates and acquaintances by connecting to other people's network of associates and acquaintances. It can be part of a traditional job search as well as searches using the hidden job market. When networking, you must gather information and seek advice about professions, fields, occupations, trends, skills and expertise required. Get referrals to others who may expedite your job search. Networking is a two-way street. Offer to help the people who are helping you—become an active part of their network.

### Long Distance Job Search

Use resources to help you identify organizations and companies of interest in your desired location, and to find people from that area with whom you can network:

- Check directories (e.g., CorpTech) for organizations/companies located there, research company websites
- Study local newspapers, job postings
- Network and conduct informational interviews
- Search for alumni in your industry/areas of interest
  - ICAN, Alumni Directory
  - Alumni Clubs
- Contact national, regional and local professional associations
- Visit, learn about employment trends, opportunities

### Record Keeping/Action Planning

Organize your job search. Find a method that works for you. Use an electronic diary, ring binder, file folders, computer reminders, database, palm pilot, Rolodex, scheduler. Keep track of:

- 1) Job search ideas
- 2) Schedule of what you need to do and when:
  - Job application deadlines
  - Networking meetings
  - Follow-up calls to make
  - Interviews scheduled
  - Thank-you notes to be sent out
- 3) Records of all contacts made and networking leads:
  - Name
  - Dates of all actions
  - Contact information
  - Referred by whom
  - Phone calls, emails, letters
  - Notes about conversations
  - Additional contacts offered
  - Ideas to pursue
- 4) Industries and companies of interest and your research findings
- 5) Advertised jobs, relevant research, records of all related actions
- 6) Jobs applied for:
  - Research on the organization
  - Dates of all actions, contact information
  - Notes on all conversations, email correspondence
  - Copy of cover letters, resumes sent
  - Results
- 7) Reflections, lessons learned, suggestions for future

## NOBODY GETS CLOSER TO THE PEOPLE. TO THE DATA. TO THE PROBLEM

At CNA we analyze and solve problems by getting as close as possible to the people, the data and the problems themselves in order to find the answers of greatest clarity and credibility - all to help government leaders choose the best course of action.

We have a professional, diverse staff of over 700 people working in a variety of critical policy areas such as national security, homeland security, healthcare and education.

We are currently recruiting for Research Analyst positions. Research Analyst opportunities are for people with degrees in engineering, mathematics, economics, physics, chemistry, international relations, national security, history, and many other scientific and professional fields of study. Candidates should have diverse views, be objective, imaginative, process driven, results oriented and committed to the common good.



For more information, please visit  
<http://www.cna.org/careers/openingsMIT.aspx>.  
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# Chapter 3.

## Internships, Jobs and Networking

### Internships: Getting Experience

Internships and summer jobs give you an opportunity to apply academic concepts in practice, and to explore possible future occupations. The experiential learning and skills acquired from internships and/or research experience on a resume make you more marketable. MIT offers a variety of programs and some have submission deadlines in the fall semester. If you are seeking an internship overseas, you will need to start your job search process at least six months to a year in advance, depending on the countries that you will be applying to.

Some internships in industry and in the executive area of government pay a reasonable stipend. Many in the non-profit sector pay little or nothing; however, if you are work-study eligible you may be able to negotiate a salary at the nonprofit of your choice. Either paid or unpaid, the experience in an internship can be extremely valuable.

Reports from a variety of sources show that, compared to the average, students who participate in these programs:

- Do better in school
- Are more likely to graduate
- Are ahead in preparation for their field
- Are viewed as better candidates in job interviews
- Receive more job offers
- Earn higher starting salaries
- Are more likely to get the job with the employer they want after graduation

Other benefits of Internships and Experiential Education Programs include developing transferable skills such as: communication, critical thinking, teamwork, change management, information technology, leadership, self-managed learning, interpersonal diversity, ethics, social responsibility, and technical knowledge.

### MIT's Opportunities for Experiential Learning and Internships

Most students are unsure of what they want to do for a profession. Those who think they know may not know how to get where they want to be, or what skills they need in order to be successful in their chosen field. The first step is to explore and experience a field through one of MIT's many Experiential Education and Internship Programs.

<http://careers.mit.edu>

### Undergraduate Research Opportunities Program (UROP)

Established in 1969, UROP is MIT's flagship academic program. Participating students work with MIT faculty and research staff in a wide variety of investigative projects, across all disciplines. While most UROP projects take place on campus, students can learn the valuable technical and collaborative skills necessary for future occupations. UROP is a widely recognized program and employers look upon participation favorably. For more information, consult the UROP web site <http://web.mit.edu/urop/>, or contact UROP staff in Room 7-104, at [urop@mit.edu](mailto:urop@mit.edu) or (617) 253-7306.

### Student/Alumni Externship Program

The Alumni Association's Student/Alumni Externship Program gives students a chance to meet and work with alumni, gain marketable job experience, and explore companies that could become potential employers. Students join alumni in their workplace during the January Independent Activities Period (IAP) and get a first-hand look at a profession. Current undergraduate and graduate MIT students are welcome to apply to the Externship Program. All applicants must submit an application form, resume and personal statement about their desire to participate. You will find more information online at <http://alum.mit.edu/students/NetworkwithAlumni/ExternshipProgram> or contact the Alumni Association at [externship@mit.edu](mailto:externship@mit.edu), (617) 252-1143 or visit the Alumni Center in W98-2nd Floor.

### Freshman/Alumni Summer Internship Program (F/ASIP)

MIT's Freshman/Alumni Summer Internship Program (F/ASIP) is a graded seminar (SP.800/SP.801) that provides participating freshmen with career development training. This seminar cultivates professional skills, assists first-year students in finding summer internships, and pairs them with MIT alumni mentors at their internships. These alumni share a learning-by-doing philosophy, a propensity for hard work, and methods for tackling problems. They also help educate students on what it takes to survive and thrive in the workplace. The program's goal is to teach valuable career planning and job skills that will be useful at MIT and beyond. Interested students should submit their F/ASIP application in the summer preceding their freshman year.

For more information about the program, including application materials and deadlines, please visit the F/ASIP website at <http://web.mit.edu/fasip>.

## MIT International Science & Technology Initiatives (MISTI)

Imagine joining a team of engineers at BMW in Munich; designing a Japanese robot; testing solar panels in Israel; or tackling a research problem at the Curie Institute. MISTI makes it possible.

MISTI connects MIT students to hands-on professional internships and research around the globe. All expenses are paid. Program coordinators work with students to match their skills and interests with MISTI's partners—hundreds of the world's leading companies, research labs and NGOs. With language and cultural preparation, participants learn first-hand how innovation happens around the world and cultivate skills that make their resumes leap off the screen.

Over 300 MIT students intern each year through MISTI programs in China, France, Germany, India, Israel, Italy, Japan, Mexico and Spain. Go now! Visit <http://web.mit.edu/misti>.

## Undergraduate Practice Opportunities Program (UPOP)

UPOP is a full-year educational program for School of Engineering sophomores administered by the Office of the Dean of Engineering and serving as the first year of the three-year Gordon-MIT Engineering Leadership Program. The summer practicum component of UPOP includes a hands-on internship with coaching before, during and after the assignment. This immersive learning experience lets students integrate their academic work in math and engineering science through application in the world of work.

The UPOP professional practice workshop during January's Independent Activities Period (IAP) covers topics in team decision making, self-awareness, negotiation, conflict resolution, product design, leadership, and networking. The experiential learning modules are led by MIT faculty from the School of Engineering and the Sloan School of Management with the help of industry professionals, alums, and outside consultants who volunteer as mentor-instructors to groups of 7-9 students. These relationships often endure beyond the workshop sessions and help to establish a foundation for the student's professional network. For more information see <http://upop.mit.edu>.

## MIT Washington DC Summer Internship Program

The Washington DC Summer Internship Program provides technically sophisticated undergraduates the opportunity to apply their scientific and technical training to public policy issues. The core of the program is focused on the summer months, when students work in the offices of government agencies, the private sector, and advocacy groups. Complementing the summer internships are a trip to Washington DC during spring break and academic exercises. Participating students are required to attend a seminar on the policymaking process during the late spring and early fall,

for which they will receive 12 units of credit upon completion. Please see <http://web.mit.edu/summerwash/www>.

## VI-A M.Eng. Thesis Program

The VI-A M.Eng. Thesis Program enables EECS students to combine classroom studies with serious professional work experience in industry with competitive salaries through a series of leading-edge technology jobs with participating companies. The VI-A program is designed to work in conjunction with the EECS five-year Master of Engineering degree program culminating in an industry-based master's thesis. VI-A work assignments are available at both domestic and international locations. For more information see <http://via.mit.edu/>

## Other Internship Programs and Resources

Internships may be offered at companies, government agencies, nonprofit organizations, other universities, and advocacy groups. Here are some helpful links to find opportunities:

- MIT Career Development Center Internship Information <http://web.mit.edu/career/www/jobs/internships.html>
- CareerBridge: see "Job Search" and "On-Campus Recruiting Schedules" <https://www.myinterfase.com/mit/student/>
- iNet Internship Network: internships available to students from eight universities, including MIT: <http://web.mit.edu/career/www/inet/>
- MonsterTrak no longer provides our CDC On- and Off-Campus Recruiting System, but it still offers job and internship opportunities for students in general: see <http://www.monstertrak.com>
- Federal Government Internships: <http://www.usajobs.opm.gov>, <http://www.studentjobs.gov>
- Internships Abroad: see The Big Guide to Living and Working Overseas, from our CDC homepage: <http://careers.mit.edu>
- Nonprofit Internships and Information: <http://www.idealists.org>
- Jobweb articles on Internship Searching: <http://www.jobweb.com/students.aspx?folderid=86>

Write to companies that recruit at MIT for full-time positions and express your interest in an internship. Ask if you might interview with them when they are on campus. They may like your initiative and interview you.

Do not automatically restrict your search to the Boston area or your hometown—a summer job away from MIT and from home can be fun and broadening. Some companies will help you find housing. Some will offer housing at a local college. If you need to find a place to live for the summer in another city, check out various online housing listings.

## Instructions on the Use of **CAREERBRIDGE**

### 1. What is **CAREERBRIDGE**?

**CAREERBRIDGE** is the Career Development Center's On- and Off-Campus Recruiting and Career Management system. When companies want to reach out to our students and Alums as potential hires, the companies post their positions here. In addition, we use it for managing some counseling functions such as office walk-ins, appointments, workshops and more. To get started, you need to go to the **CAREERBRIDGE** site and set up your account. Read through this FAQ for more details.

### 2. How do I set up my **CAREERBRIDGE** account?

- Go to the **CAREERBRIDGE** website: <https://www.myinterfase.com/mit/student>
- Click 'Do I have an account?'
- Enter your MIT E-MAIL in the 'Username' text box/field
- Click 'Reset Password'
- If you ARE registered, you will receive a message telling you to check your email
- If you are NOT registered, register by clicking on the link directly above the text box/field
- Click on the 'continue' button when you've completed the profile
- Click 'Submit Profile'
- Your request will be submitted for VERIFICATION and APPROVAL
- If you have been approved, you will receive an email within 2 business days
- Log on!

### 3. How do I upload my resume/cover letter/etc.?

- Create your resume(s)/cover letter(s)/etc.
- Log into your **CAREERBRIDGE** account
- Mouse over 'My Account'
- Click 'My Documents'
- You can upload up to 99 resumes & cover letters

### 4. How do I submit a resume/cover letter/etc.?

- Log into your **CAREERBRIDGE** account
- Mouse over 'On-Campus Recruiting Schedules'
- Click 'Interviews I Qualify For'
- Click on the schedule ID # of any job you find attractive – NOTE: The results of this search contain ONLY the jobs for which you qualify
- In the upper left corner, click 'Apply Now'
- Select the documents you wish to submit

IMPORTANT NOTE: ANY changes made to a document that you have submitted to a schedule will ALSO CHANGE the SUBMITTED DOCUMENT! Please be sure to label your documents appropriately and keep thorough records of your submissions!

### 5. How do I change my email address?

- Log into your **CAREERBRIDGE** account
- Mouse over 'My Account'
- Click 'My Profile'
- Click the 'Personal Information' Tab
- Change your email address
- Click 'Save'

### 6. What do 'Accepted' and 'Alternate' mean, and what's the difference?

When you are labeled as "accepted" by a company, it means that your submitted documents (resume, cover letter, etc.) **exceed** the expectations of the company, and they would like to interview you. When a company selects you, an email notification will be sent to your email with details including the Schedule ID, Company Name, Sign-Up date, sign-up instructions and more. You and other Accepted students will be allowed to sign-up BEFORE the Alternates.

When you are a labeled as an "alternate" by a company, it means that your submitted documents (resume, cover letter, etc.) meet the expectations of the company, and they would like to interview you. Though you may not be as qualified as the "accepted" students, the company feels as though you are still a good fit! When a company selects you, an email

notification will be sent to your email with details including the Schedule ID, Company Name, Sign-Up date, sign-up instructions and more. You and other Alternate students will be allowed to sign-up AFTER the Accepted.

7. How do I sign up for an interview that I've been selected/labeled as Accepted/Alternate?

- Log into your **CAREERBRIDGE** account
- Mouse over 'My Account'
- Click 'My Activity'
- Click the 'Schedules' Tab → then on the 'Preselect' Tab
- Click on the Job Title for which you've been selected (labeled under header Preselect Status)
- In the upper left corner, click 'Sign Up'
- Click on the Interview Date
- Scroll to bottom where you will see available slots
- Click 'Sign-Up' for the corresponding time

8. How do I switch my time or cancel an interview time?

- Log into your **CAREERBRIDGE** account
- Mouse over 'My Account'
- Click 'My Activity'
- Click on 'Schedules' Tab → then on the 'Interviews' Tab
- Click on the Job Title for which you've signed up
- Scroll to mid-page
- Click your session's 'Interview Date' (there is a black arrow pointing to the session on which you are signed up)
- Scroll to bottom
- Click 'Switch Time\*' or 'Cancel\*\*'

\*If there are no available times, you will only be able to sign up on the same spot. Please keep in mind that some positions have tough competition and you may PERMANENTLY LOSE your spot if you are not careful. You CAN NOT switch times for an interview within 48 hours of your scheduled interview!

\*\*You CAN NOT cancel an interview within 48 hours of your scheduled interview!

To see our No Show and Cancellation Policy: <http://web.mit.edu/career/www/jobs/noshow.html>

9. I can't find company ' \_\_\_\_\_ '! How do I find company ' \_\_\_\_\_ '?

- Log into your **CAREERBRIDGE** account
- Click 'Employer Directory'
- Type in the first letter of the company name ONLY
- Click 'Search'
- Look through the list for the company

REMEMBER: Some companies use acronyms to refer to themselves

- Click on the company title
- Scroll to bottom of page
- Click on the numbers available under 'Openings' → 'Schedules' ('Jobs' are not On-Campus Recruiting related, but you can select them if you like)

REMEMBER: If you can not apply, it will say why in red at the top of the page

IMPORTANT NOTE: If you are having trouble finding a company, you may be doing a search that is too specific. Some companies will use acronyms to reference themselves, making it difficult to find them in systems like **CAREERBRIDGE**. (Example: 'Procter & Gamble' will sometimes be seen as 'P&G')

10. Can employers view all of my documents if I have not used them for submissions?

No. If you have selected to allow employers to view your account, all they will have access to when they search is your default resume. All other documents that you have uploaded will remain private unless you submit them to a job/schedule. In this way, **CAREERBRIDGE** acts as document storage with the "option" of submission.

11. I am unable to sign up for an interview slot; it says "no slots available." What does this mean?

Unfortunately, this means exactly what it says; that there are no slots available for you to choose. If you have been selected as an Alternate (see above) then the students labeled as Accepted have filled all the available time slots.

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## Networking

### Networking Defined

A professional network can be defined as people you know who can provide leads, support and advice about your career and the job market. They can help you tap the vast majority of jobs that are never advertised. For this reason, networking needs to be an integral part of your job search. The benefits of networking include learning more about career options, increased visibility within your field, propelling your professional development, finding suitable mentors, increasing your chances of promotion and perhaps finding your next job. Though initially, you may feel uncomfortable about the notion of networking, it is a skill that can be learned and mastered by following the practical guidelines below.

Start by networking with people you know such as family, friends, faculty, students, community members, service professionals (doctors, dentists), alumni, and neighbors. Talk to them about what you want to do. Ask whether they know of any companies or organizations doing the types of things that interest you. Do they know of anyone in a related area of work or study who you might talk to? Networking etiquette requires that you *do not ask for a job*. The focus of networking is to meet many people in your field and find out more about the jobs they do.

This is how you get to see first hand the type of company and work that you really want to do. The art of informational interviewing is in knowing how to balance your ultimate agenda (to locate a job) with the unique opportunity to learn firsthand about the demands of your field. Always approach the experience as asking for advice rather than looking for work. Be courteous and professional at all times, even with your aunt's best friend. Never abuse your privilege by asking for a job, but execute your informational interviews skillfully, and a job may follow.

### Step 1: Identify Your Network

Start by listing everyone you know who is a potential prospect.

- Family (parents, siblings, uncles, aunts, cousins)
- Friends
- School contacts (faculty, teachers, classmates, alumni)
- Community associates (religious affiliates, neighbors)
- Work contacts (supervisors, coworkers)
- Professional associations, industry receptions, career fairs

### Step 2: Prepare and Practice Your Script

Prepare a brief introductory script. This should be a one-minute summary of your interests, goals and your needs right now. Practice by telling as many people in the above

list as you can. Once you are comfortable with your 'pitch', start asking if they know of anyone who you should contact. You can then start contacting these people by phone or email.

A script will sound something like: "I am in my junior year at MIT and have a particular interest in Engineering Logistics. I hope to ultimately apply my degree to product and inventory management. Right now I am trying to learn more about the actual experience of people working in these areas. Could you spare some time to speak with me about the current trends and opportunities in this field?" Or ... "Do you know anyone I could speak with in order to find out more about the field?"

If you have found the contact person through another person your script might be:

"My name is Sandra Chee. I am due to graduate from MIT in 6 months time. I received your name from your company's recruiting representative, David Jones who suggested that I contact you. I am studying biological sciences and David thought that, as you are doing work in this field, you might be able to tell me a bit about it. David also thought that you might be able to give me some names of other people or companies that I could approach for a possible informational interview (or summer internship)."

---

## Informational Interviewing

### Step 3: Arrange an Informational Interview

This script then forms the basis of an email that you might write to someone with whom you would like to have an informational interview. The first networking email may be like a mini cover letter. Use an email subject line that will be clear and encourage your reader to open the email—you might write something like "Question from an MIT Student." If you prefer, you can try to call the person directly to set up an informational interview at a later date.

Prepare for your informational interviews just as you would for an actual job interview: polish your presentation and listening skills, and conduct preliminary research on the organization. You should outline an agenda that includes well-thought-out questions.

Your networking meeting should include the following elements: introduction, self-overview, Q & A, obtaining referrals and closing.

Begin your interview with questions that demonstrate your genuine interest in the other person such as, "Describe a typical day in your department." Then proceed with more general questions such as, "What are the employment prospects in this field?" or "Are you active in any professional organizations in our field and which would you recommend?" If appropriate, venture into a series of

questions that place the employer in the advice-giving role, such as, “What should the most important consideration be in my first job?” Be sure to ask for referrals to other professionals. You could also ask their opinion about your resume.

Always remember to send a thank-you letter to every person who grants you time and to every individual who refers you to someone.

What motivates professionals to grant informational interviews? The reasons are varied. Generally, most people enjoy sharing information about themselves and their jobs and, particularly, giving advice. Some may simply believe in encouraging newcomers to their profession and others may be scoping out prospects for anticipated vacancies. It is common for professionals to exchange favors and information, so do not hesitate to call upon people. Also, they may be aware that some day the tables may be turned and you could become a helpful element of their networking.

Keep track of your networking meetings and be proactive with follow up. Refer to ‘Record Keeping’ on page 10 for guidelines about implementing a job search action plan. Keep a list of your contacts and update it frequently with the names of any leads given to you.

In a group setting, circulate and meet people, but do not try to talk to everyone. It is better to have a few meaningful conversations than 50 hasty introductions. If you are at a reception, be sure to wear a nametag and collect or exchange business cards so you can later contact the people you meet. Send a thank-you note or email if appropriate.

**Be Dedicated to Networking:** Most importantly, networking should be ongoing. You will want to stay in touch with contacts over the long haul—not just when you need something. Make networking part of your long-term career plan.

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## Career Fairs/Company Presentations

Career Fairs are a great way to connect with potential employers. Many professional groups hold public career fairs which are advertised through newspapers. At MIT, career fairs are organized and run by a number of student organizations. The MIT Career Development Center holds an annual career week in the fall to prepare students for the Career Fair. This is a tremendous opportunity for students to meet a wide variety of employers. Keep in mind that career fairs should be just one small part of your entire job search process; however, they can be a successful part. Here are some useful tips to help make the most of your career fair experience.

## Keys to Career Fair Success

**Research:** Have a plan of attack for the fair. Research the companies and organizations you are interested in and see if any new companies have registered when you arrive at the fair. Take time to survey the layout of the fair and determine where your “ideal” employers are located.

**Resumes:** Bring more than you think you will need—at least two for each organization.

**Attire:** Conservative business attire is essential. Know what is the expected attire of your profession and dress accordingly. It is always better to be overdressed than underdressed.

**Be Proactive:** You may only have three minutes to market yourself so be sure to make the most of your time. Start with the basics: approach the company representative in a friendly manner, make eye contact, offer a firm handshake, and show enthusiasm. Recite your brief script and prepare some questions just as you would for any employment interview. The most common question you will face is something along the lines of “what are you here for today?” A great follow-up question for you to ask is, “What do I need to do to obtain a second interview with your firm?” Obtain a business card or contact information for representatives of organizations that interest you.

**Follow-up:** There are two main methods of follow-up. Some suggest calling the recruiter within a day or two of the fair and leaving a voicemail message thanking the recruiter again for his/her time. Another tactic would be to write a thank-you note/email and send it the next day to the address on the recruiter’s business card. The content of the note should include thanking the recruiter for his/her time and restating your interest and qualifications for the position.

## Questions to Ask Employers at a Career Fair

Your questions should be natural. Before asking questions, introduce yourself and establish rapport with the company reps. Listen carefully to their answers. Be courteous and be sure to thank them before closing the conversation.

Try not to ask questions that could easily be answered by the company’s website (e.g., what does your company do?).

**Do not read from this list. These are intended as examples of kinds of questions you could ask.**

1. Where do MIT grads typically work in your company?
2. Did you go to MIT? (Whether or not) What did you major in?
3. What do you do at your company?
4. How long have you worked there?
5. Does your company hire on a continual basis or only at certain times of year?

6. How long does your hiring process take?
7. What are the most important qualifications your company looks for in an employee?
8. Are there particular personality traits you look for?
9. What are your company's major goals in the next few years?
10. Are graduate degrees important? In what areas within your company?
11. What kinds of courses do you suggest in order to be a successful candidate?
12. Is there a GPA cut-off for your recruiting process?
13. What kinds of entry-level positions exist within your organization that would be open to someone with my background?
14. As an entry-level employee, what kind of career advancement opportunities would be open to me in two, or five years from now?
15. How many years do entry-level employees typically work for your company? What is your retention rate?
16. Do you expect employees to relocate?

### Company Presentations

MIT hosts employer panels and company presentations. Representatives from the leading industries and companies present on the trends of that industry and the opportunities that one can pursue within the industry. These may be followed by a reception for attendees.

Try to personally meet the representatives and ask thoughtful questions to gain information about the industry in general and their company specifically. The person you are networking with may not have a job opening, but he or she may know someone who is hiring. The key is to exchange information and then expand your network by obtaining additional referrals each time you meet someone new.

<http://web.mit.edu/career/www/events/presentations.html> lists the company presentations.

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## Alumni Association Resources

### Alumni Directory and the Institute Career Assistance Network (ICAN)

The Institute Career Assistance Network (ICAN) is a searchable database of alumni who volunteer their time as career advisors. It includes more than 3,000 MIT alumni who are willing to share their experiences and offer advice about career paths, interviewing and specific companies. You can communicate with them by telephone, email or meet in person.

The ICAN website <http://alum.mit.edu/benefits/CareerGuidance/ICAN> provides tips for making the contact, conducting a successful informational interview, and a bibliography of recommended career-related publications. To use the online database students must register for an Infinite Connection account at <http://alum.mit.edu> or visit the Alumni Center in W98-2nd Floor. You can also write to: [ICAN@mit.edu](mailto:ICAN@mit.edu).

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## Community Service/Volunteering

Put your communication, teamwork, and leadership skills to use while giving back to the community. Refer to MIT's Public Service Center for ideas: <http://web.mit.edu/mitpsc>.

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## Professional Associations

Professional Associations can be an excellent resource for job seekers. Through their various activities and services (meetings, conferences, publications, websites, etc.) professional associations provide information about career fields, job opportunities, and employers in the professions they serve. They can be particularly helpful if you need to create a long-distance network to help you conduct a long-distance job search.

For a comprehensive list of professional associations go to: <http://web.mit.edu/career/www/jobs/proforg.html>. Also consult the MIT Libraries Virtual References at <http://libraries.mit.edu/help/virtualref>.

To students (for whom time and money may be in short supply), the websites of professional associations offer easy, inexpensive, accessible (24 hours a day, 7 days a week!) access to:

- Information about career options and industry/professional trends in various fields.
- Professional contacts: their members form a network of people who are often willing to assist others in career exploration
- Job listings

To learn about professional organizations in your field or in other fields you wish to explore, ask your advisor or other faculty members.

# Chapter 4.

# Resume and Career Writing

## Resume Guidelines

Your resume should be a concise summary of the high points of your education, work experience, and other qualifications relevant to your audience's needs and to your employment interests, not a complete history of your life. It communicates your professional qualifications to employers, to interest them in interviewing you, and it creates their first impression of you. It is a marketing tool and an introduction to you and your experiences. Do enough research about the employer and the field to decide which messages are most important to your audience, and communicate these messages succinctly and clearly in a visually appealing format. Here are some guidelines to help you do this:

### Presentation Checklist

- Do not use a Microsoft Word resume template. None of them scan well.
- Use a laser printer.
- It is safe to use a conservative font, such as Arial or Times New Roman.
- Font size should be 10-12 points.
- Use 8 1/2" x 11" paper, printed on one side only.
- Use high quality resume paper.

### Format

- Stick to one page; use two pages if you have an advanced degree or extensive experience (10+ years).
- Make the page easy to scan and graphically pleasing: leave sufficient white space.
- Select a format that suits your qualifications. Do not automatically follow someone else's, which may not suit what you have to say.
- Avoid underlining, may use bullets to emphasize your credentials.
- Use bold face sparingly for headings and employer information

### Content

- Put name, address, and phone number at the top of the page. If you have a second page, repeat your name at the top.
- Choose topic headings that invite your readers' interest, e.g., 'Experience', 'Leadership', 'Skills', 'Activities/Honors' rather than "employment" or "other."
- Include marketable and/or relevant data only; for example, include classes that have been most

important in your education and are most relevant to the type of work you seek; do not provide an extensive list of courses.

- Highlight skills, accomplishments, capabilities, and work experience. Give evidence of your personal impact: show not only that you completed tasks but that you contributed to organizational goals.
- Cite numbers to convey size and/or scale of project, budget, and staff supervised.
- Give examples that demonstrate desirable personality traits such as leadership, interpersonal facility, teamwork, and initiative.
- Minimize personal information and omit unrelated memberships, age, marital and health status, and information that is repetitive, implicit (e.g., high school graduation for a college graduate), or out-of-date. If you are a US citizen or hold a permanent resident visa, include this if readers might have reason to think otherwise.
- Generally, it is a good idea to exclude data relevant to salary expectations, religious or political affiliations, and geographic descriptions.
- References are usually omitted. Employers assume that "references are available upon request," so leave this phrase off.

### Style

- Proofread to eliminate all spelling, punctuation, and grammatical errors.
- Use action verbs and strong adjectives. (See "Action Verbs.")
- Make it future or present oriented, suggesting that "I *am* this kind of person, with these abilities, as my past record demonstrates."
- Avoid repeating words or phrases.
- Leave out unnecessary words, sentences, and phrases such as "Duties included / Hired to / Project involved."
- Avoid stilted or confusing language. Ask yourself, "Would I talk like that?"
- Do not use the first person I or any pronouns.
- Be consistent and use the same grammatical style throughout.
- Avoid self-flattering terms such as "highly skilled, outstanding, or excellent." Describe your accomplishments effectively and let readers decide for themselves that you are well qualified.
- Be honest and accurate, but not overly modest.
- Convey through the style and content of your resume an understanding of your audience's needs, priorities, hiring criteria, and vocabulary.

## Final Edit

- Ask a counselor, friend, or someone unfamiliar with your background to review your resume for clarity and effectiveness.
- Tailor your resume to the specific qualifications of the job for which you are applying and/or to the specific employer.
- Include all-important information, such as dates of graduation, major, GPA, etc.
- Proofread one more time to ensure correct spelling and punctuation.

## The Top 10 Pitfalls in Resume Writing

1. Too long. Restrict your resume to one page.
2. Typographical, grammatical, or spelling errors. Have at least two people proofread your resume.
3. Hard to read. Keep it simple with clean lines and white space.
4. Too verbose. Say as much as possible with as few words as possible, avoid use of jargon.
5. Not enough information. Give dates describing related work experience, be specific about skills, accomplishments, activities, interests, and memberships.
6. Irrelevant information. Customize each resume to each position you seek (when possible). Of course, include education and work experience, but emphasize relevant experience, skills, accomplishments and activities. Do not include marital status, age, sex, children, height, weight, health, church membership, etc.
7. Obviously generic. Tweak each resume according to the job description. The employer needs to feel that you are interested in that particular position with his or her company.
8. Too fancy. Of course, use good quality bond paper, but avoid exotic types, colored paper, photographs, binders, and graphics. Electronic resumes should include appropriate industry keywords and use a font size between 10-12 points. Use italics and bolding sparingly.
9. Too static. Make your resume as dynamic as possible. Begin every statement with an action verb. Use active verbs to describe what you have accomplished in past jobs. Take advantage of your rich vocabulary and avoid repeating words, especially the first word in a section.
10. Too modest. The resume showcases your qualifications in competition with the other applicants. Put your best foot forward without misrepresentation, falsification, or arrogance.

## Online Resumes

Though scanning technology and practices vary and are constantly changing, some companies still scan resumes and/or use keywords to identify candidates from their database. You want to fill your resume with as many of these words as possible. Companies that pick up many resumes at career fairs may use scanning technology, though you should always check with the employer requirements regarding format.

The essential keywords are specified by each employer for each position. You can only make reasonable assumptions about what a specific employer will ask for. Keep a log of keywords that apply to your occupation and industry. Do not fold or staple the resume.

<http://careers.mit.edu>

## SIMPSON GUMPERTZ & HEGER

Engineering of Structures  
and Building Enclosures

Simpson Gumpertz & Heger is a national, award-winning engineering firm that designs, investigates, and rehabilitates structures and building enclosures.

Our goals are simple: to earn the lasting trust of our clients, gain the respect of our most capable peers, and further the standards of practice in all areas of our profession.



From left clockwise: Griffith Observatory, Los Angeles, CA; China Basin Landing, San Francisco, CA; Jean Yawkey Place, Boston, MA; New Museum of Contemporary Art, New York, NY.

Our diverse team members include engineers, architects, scientists, and many other technical professionals. Most importantly, our highly qualified staff members are led by principals and project managers who average 20 years of employment with SGH. These leaders provide quality of service and team continuity to support our long term client relationships.

We offer an excellent compensation and benefits package in a corporate culture based on learning and growth. To learn more about SGH and current job opportunities, visit our web site at [www.sgh.com](http://www.sgh.com)

Boston  
Los Angeles  
New York  
San Francisco  
Washington, DC  
[www.sgh.com](http://www.sgh.com)



## Action Verbs

### Management Skills

Administered  
Analyzed  
Assigned  
Chaired  
Consolidated  
Contracted  
Coordinated  
Delegated  
Developed  
Directed  
Evaluated  
Executed  
Organized  
Oversaw  
Planned  
Prioritized  
Produced  
Recommended  
Reorganized  
Reviewed  
Scheduled  
Supervised

### Communication Skills

Addressed  
Arbitrated  
Arranged  
Authored  
Co-authored  
Collaborated  
Corresponded  
Developed  
Directed  
Drafted  
Enlisted  
Formulated  
Influenced  
Interpreted  
Lectured  
Mediated  
Moderated  
Negotiated  
Persuaded  
Promoted  
Proposed  
Publicized  
Reconciled  
Recruited

Spoke  
Translated  
Wrote

### Research Skills

Clarified  
Collected  
Critiqued  
Diagnosed  
Evaluated  
Examined  
Extracted  
Identified  
Inspected  
Inspired  
Interpreted  
Interviewed  
Investigated  
Organized  
Reviewed  
Summarized  
Surveyed  
Systemized

### Technical Skills

Assembled  
Built  
Calculated  
Computed  
Designed  
Devised  
Engineered  
Fabricated  
Maintained  
Operated  
Pinpointed  
Programmed  
Remodeled  
Repaired  
Solved

### Teaching Skills

Adapted  
Advised  
Clarified  
Coached  
Communicated  
Conducted  
Coordinated

Developed  
Enabled  
Encouraged  
Evaluated  
Explained  
Facilitated  
Guided  
Informed  
Instructed  
Lectured  
Persuaded  
Set goals  
Stimulated  
Taught  
Trained

### Financial Skills

Administered  
Allocated  
Analyzed  
Appraised  
Audited  
Balanced  
Budgeted  
Calculated  
Computed  
Developed  
Managed  
Planned  
Projected  
Researched

### Creative Skills

Acted  
Conceptualized  
Created  
Customized  
Designed  
Developed  
Directed  
Established  
Fashioned  
Illustrated  
Instituted  
Integrated  
Performed  
Planned  
Proved  
Revised

Revitalized  
Set up  
Shaped  
Streamlined  
Structured  
Tabulated  
Validated

### Helping Skills

Assessed  
Assisted  
Clarified  
Coached  
Counseled  
Demonstrated  
Diagnosed  
Educated  
Facilitated  
Familiarized  
Guided  
Inspired  
Motivated  
Participated  
Provided  
Referred  
Rehabilitated  
Reinforced  
Represented  
Supported  
Taught  
Trained  
Verified

### Clerical or Detail Skills

Approved  
Arranged  
Catalogued  
Classified  
Collected  
Compiled  
Dispatched  
Executed  
Filed  
Generated  
Implemented  
Inspected  
Monitored  
Operated

Ordered  
Organized  
Prepared  
Processed  
Purchased  
Recorded  
Retrieved  
Screened  
Specified  
Systematized

### Stronger Verbs for Accomplishments

Accelerated  
Achieved  
Attained  
Completed  
Conceived  
Convinced  
Discovered  
Doubled  
Effectuated  
Eliminated  
Expanded  
Expedited  
Founded  
Improved  
Increased  
Initiated  
Innovated  
Introduced  
Invented  
Launched  
Mastered  
Originated  
Overcame  
Overhauled  
Pioneered  
Reduced  
Resolved  
Revitalized  
Spearheaded  
Strengthened  
Transformed  
Upgraded

*From To Boldly Go: Practical Career Advice for Scientists, by Peter S. Fiske*

## Writing About Your Skills—PAR Statements

PAR statements in your resume make it easy for employers to recognize your achievements. They provide a writing formula that stresses your skills and achievements. This is a way of writing out your skills on a resume to maximize their impact.

Using the action verbs listed on the previous page, write your experience in the following format.

Describe this experience in terms of demonstrated skills and accomplishments:

- 1) Describe the **project**, the context, task, job.
- 2) What **activity** did you do?
- 3) What were the **results**, outcomes, benefits?

Present the skill as a concrete action that has been done. Do not use the words “took part in,” or “gained experience in,” or “assisted in.”

Quantify the results by stating the amount of dollars saved, the number of clients served, the percentage increase in productivity or improvement in efficiency.

### Samples of how to stress your skills:

#### Before:

Cambridge Performing Center, Cambridge, MA

May 2006-June 2008

*Theatre Marketing Intern*

Responsibilities included coordinating artist press releases, compiling tracking sheets based on information from reservations and box office attendants, handling photo and press release mailing to media, assisting in radio copy writing and performing various other duties as assigned.

#### After:

**Cambridge Performing Center (CPC)**, Cambridge, MA

May 2006-June 2008

*Theatre Marketing Intern*

- Coordinated artist press releases that contributed to an increase in annual sales by 10%
- Compiled and maintained a mailing list of 10,000 customers, CPC’s largest ever
- Organized photo and press releases to XYZ Television and Cambridge Daily News
- Contributed to the copy writing of promotional radio commercials for five events

#### Before:

Bright Consulting Group, New York, NY

June-July 2008

Marketing Analyst

I analyzed competitive strategies for clients in the bio tech industry. Data gathered assessed profitability of strategies

#### After:

**Bright Consulting Group**, New York, NY

June-July 2008

*Marketing Analyst*

- Assessed profitability of expansion strategy in the biotech industry; results were used by the client to make market entry decision
- Gathered data, as part of a three-member team, by interviewing over 100 potential customers and presented the results to the clients

Below are some further samples of PAR statements (both bullet form and paragraph form are acceptable):

- Investigated effects of gas phase oxygen concentration levels on the differentiation of embryonic stem cells in order to establish optimal settings for growth.
- Designed and implemented a website containing interactive problem sets, information, and announcements for Math competition participants.
- Investigated and evaluated business communication practices and expertise within XYZ Co. to model framework for globalization initiative to improve the sharing and use of existing knowledge.
- Found systematic method to raise glass transition temperature of vaccines, which allowed a higher storage temperature for the vaccines. Generated \$5 million annual saving in refrigeration costs.

- Technically advanced and trained the Major Account Sales crew with computerized presentation designs and introduced customer and industry market data software. Organized and developed new methods of reporting and presenting material to top advertisers.
- Reviewed literature and evaluated past models, expanded adaptability of key components, improved stress analyses of fuel forms.
- Consolidated 23 local customer service centers into five regional centers achieving 15% cost reduction and improving customer services.
- Led design efforts of five-member team that developed and manufactured a cooling system for desert combat aviators in 90 days (10 days ahead of the schedule).
- Using critical path scheduling and sub contractor management, successfully organized \$3,000,000 pier renewal due to ship collision.
- Wrote software for simulating complex distillation processes that was adopted throughout XYZ Co. leading to significant savings in manufacturing costs.
- Proposed procedure to streamline the process of reaching optimized fuel design. Produced corresponding computer program using C++ and Fortran, and designed Graphical User Interface (GUI) for better communication with users.
- Created, refined and trained Sales Team on new presentation package and materials. Model was adopted and resulted in a 2% increase in overall company revenue.
- Incorporated new algorithms into pipeline simulation modules and achieved tenfold increase in speed.

**Samples of Freshman PAR Statements:**

**Math Team Captain**

Organized review sessions and scored practice tests, leading team to Top 5 finishes in the Arizona State Math League.

**National Honor Society Service Chair**

Coordinated the Senior Citizens Ball, which raised \$1,500 for a new Senior Activities Center.

**Swim Instructor**

Taught children between the ages of four and six basic swimming techniques to promote water safety and awareness.

**Radio Shack Cashier**

Communicated product details and provided exceptional customer service to 50+ people per day. Promoted to Assistant Manager after only four months.

**Burger King Team Member**

Worked in fast-paced environment, received food-handling/cashier training, and experienced assembly-line teamwork.

**Country Club Tennis Instructor**

Worked with five 12-year-old children and developed their tennis playing ability, as well as cared for their well-being. Provided sunscreen, snacks, supervision, and tennis instruction. Helped to bring about a successful summer with no injuries or complaints.

**Describing Transferable Skills**

Your resume should describe your experience in the form of PAR statements: project, activity and result.

The following exercise will help you to describe your skills. Complete the following worksheet describing your own experiences by using: Project + action verb + activity + result/outcome/benefit.

Project/purpose	Activity/task beginning with action verb	Result/outcome/benefit

## Sample Resumes

School Address:  
77 Engineer St.  
Cambridge, MA 02139

**Student One**  
**studentone@mit.edu**  
**(xxx) xxx-xxxx**

Home Address:  
xxx College St.  
Centertown, Newstate xxxxx

<b>Education</b>	<p><b>Massachusetts Institute of Technology (MIT)</b> Candidate for Bachelor of Science in Aeronautical/Astronomical Engineering Coursework includes: Calculus, Electricity and Magnetism.</p> <p><b>Southtown High School</b> Valedictorian in class of 128 students; SAT: 1260, ACT: 33 Relevant Courses: AP Calculus, AP Statistics, Physics.</p>	<p>Cambridge, MA June 2012</p> <p>Southtown, NS May 2008</p>
<b>Leadership Experience</b>	<p><b>MIT Undergraduate Giving Campaign</b> <i>Class of 2012 Co-Chair</i></p> <ul style="list-style-type: none"> <li>- Trained 12 members from the freshman class in fundraising activities, such as how to ask for a donation and how to properly document a donation.</li> <li>- Organized a week-long schedule for the 12 members and myself to work at a booth to ask for donations.</li> <li>- Achieved 31% participation within the freshman class, higher than that of the sophomores and juniors.</li> <li>- Raised \$1,250 from the freshman class for the MIT Public Service Center.</li> </ul> <p><b>High School Newspaper</b> <i>Chief Editor</i></p> <ul style="list-style-type: none"> <li>- Proofread each article and authored two to three articles per issue.</li> <li>- Printed one 24-page newspaper per month for 10 months.</li> <li>- Oversaw staff of 14 students. Answered questions regarding articles and page design.</li> </ul> <p><i>Assistant Editor</i> <i>Sports Editor</i></p> <p><b>Relay For Life</b> <i>Team Captain</i></p> <ul style="list-style-type: none"> <li>- Organized a team of 15 students for the Relay for Life.</li> <li>- Coordinated fund-raising efforts through the Beta Club, an organization for students with all A's.</li> <li>- Raised \$500 for cancer research.</li> </ul>	<p>Cambridge, MA November 2008</p> <p>Southtown, NS August 2007-May 2008</p> <p>W. Southtown, NS April 2007</p>
<b>Work Experience</b>	<p><b>Area Supermarkets</b> <i>Clerk and Bagger</i></p> <ul style="list-style-type: none"> <li>- Provided customer service to 100+ people per day. Bagged groceries and received cashier training.</li> </ul> <p><b>Taco Bell</b> <i>Team Member</i></p> <ul style="list-style-type: none"> <li>- Received cashier and food handling training, worked in a fast-paced environment, and experienced assembly-line teamwork. Served 100+ people per day.</li> </ul>	<p>W. Southtown, NS January 2008-May 2008</p> <p>W. Southtown, NS June 2007-January 2008</p>
<b>Activities &amp; Awards</b>	<p><b>MIT Varsity Track &amp; Field Team</b> <i>Team Member, Pole Vaulting.</i></p> <p><b>High School Varsity Athletics</b> Track and Field, <i>Captain</i>; Football, <i>Team Member</i>; Wrestling, <i>Team Member</i>.</p> <p><b>STAR Student Award</b></p> <p>Awarded to the senior from each high school in Newstate with the highest SAT score.</p> <p><b>Havoline Scholar Athlete Award</b></p> <p>Presented by The National Football Foundation and College Hall of Fame, Inc. to the top 40 scholar athletes in the state of Newstate.</p>	<p>September 2008-Present</p> <p>August 2004-May 2008</p> <p>March 2008</p> <p>December 2007</p>
<b>Skills</b>	<p><b>Computer:</b> Microsoft Word, Excel and PowerPoint</p> <p><b>Carpentry:</b> Framing, Masonry, Household Electrical Wiring, Flooring, Roofing, Plumbing.</p>	

Undergraduate interested in Management Consulting  
See Cover Letter on page 36

School Address:  
XXX Memorial Dr.  
Cambridge, MA 02139

**JANE DOE**  
someone@mit.edu  
(XXX) XXX-XXXX

Home Address:  
Someplace, MA

- Education**      **MASSACHUSETTS INSTITUTE OF TECHNOLOGY (M.I.T.)**      **CAMBRIDGE, MA**  
Candidate for B.S. in Biology, GPA: 4.6/5.0      2006
- Concentration in Management at Sloan Business School and Minor in Brain and Cognitive Sciences.
  - Authored 5 publications in the *MIT Undergraduate Research Journal* and other peer-reviewed journals.
  - Relevant Coursework: Finance Theory, Economics of the Health Care Industry, Strategic Decision-Making in Life Sciences, Building a Biomedical Business, Cancer Genetics and Therapies, Cellular Neurobiology, Immunology.
- Experience**      **PUTNAM ASSOCIATES**      **BURLINGTON, MA**  
**Analyst**      2005
- Evaluated in 6-member team whether client's marketing strategy for its \$100M organ transplant drug effectively targets key decision-makers in transplant community. Client implemented proposed improvements in message content and delivery, designed to increase prescriptions for product by nearly 30%.
  - Managed recruitment and interviewing process of 98 physicians to obtain primary data for marketing case. Analyzed data from interviews and secondary research in Excel/Access. Prepared PowerPoint deck for presentation to client.
  - Analyzed past product switches from predecessor to successor drugs for independent project. Presented recommendations for future drug launches. Developed a database providing key criteria for launching various types of drugs.
- MIT PROGRAMS ON THE PHARMACEUTICAL INDUSTRY**      **CAMBRIDGE, MA**  
**Health Economics Research Assistant, Sloan Business School**      2005
- Designed, created, and tested a strategic model for the pharmaceutical industry that analyzes safety, efficacy, and economics to forecast (prior to clinical trials) which drugs will succeed on the market. Early elimination of inadequate drugs will significantly reduce the \$800M spent to successfully launch a drug.
- MERCK & CO., INC.**      **RAHWAY, NJ**  
**Pharmaceutical Laboratory Research Assistant, Infectious Disease Department**      2004
- Identified deficiencies in Type 2 Diabetes drugs on the market and screened chemicals on new cellular targets to develop an efficient drug without these shortcomings. Drug predicted to obtain substantially greater market share in the \$14B oral Type 2 Diabetes drug market compared to competitors.
- MIT CENTER FOR CANCER RESEARCH**      **CAMBRIDGE, MA**  
**Academic Laboratory Research Assistant, Housman Laboratory**      2003 - 2005
- Developed a product to recognize activity of a cancer-causing gene, aiding in discovery of drug for brain cancer. Engaged in all stages of product development: identification of market need, engineering of product, collaborating with industry for testing, production, and marketing of final drug.
  - Designed a new sequencing technique that refines a common laboratory protocol. New procedure increases efficiency by 50% on average, reducing processing time by 25%, and creating more usable biological end-product.
- Leadership**      **MARCH OF DIMES BIRTH DEFECTS FOUNDATION**      **BOSTON, MA**  
**Director of Massachusetts Youth Public Affairs**      2003 - Present
- Lobbied legislators to encourage federal, Massachusetts, and California governments to develop public policies to improve the health of women. Introduced and promoted 10 Senate Bills, 4 of which have been approved thus far.
  - Represented Foundation on the Massachusetts State Public Affairs Committee.
  - Organized conferences and fundraisers as a volunteer for the past 7 years (1998-Present).
- JOURNAL OF YOUNG INVESTIGATORS**      **CAMBRIDGE, MA**  
**Story Editor and Science Journalist**      2005 - Present
- Managed 25 science journalists, delegated writing and editing tasks, and chose articles to print in monthly journal.
  - Created daily digests about current science news, distributed to all science journalists.
- SCIENCE & ENGINEERING BUSINESS CLUB**      **CAMBRIDGE, MA**  
**Consulting Focus Group Organizing Committee**      2005 - Present
- Organized 6 campus-wide information session to educate students about careers in consulting and law.
  - Selected and worked closely with speakers from diverse occupational backgrounds.
- Awards & Interests**
- Robert C. Byrd Scholarship, awarded to top 1% of U.S. students for academic excellence.
  - Rensselaer Medal, awarded to top 20,000 students worldwide for achievements in mathematics and science.
  - Interest in track & field, travel, photography, and oncology.

## Student Enviro Eng

Environment St.  
Cambridge, MA 02139

Phone: (617) xxx-xxxx  
Email: EnviroEng@mit.edu

### EDUCATION

#### Massachusetts Institute of Technology (MIT) – Cambridge, MA

*Master of Engineering in Environmental Engineering* 2009 (expected)

- Relevant Coursework: Strategies for Sustainable Business, System Dynamics, Sustainable Energy, Applications of Technology in Energy and the Environment, Design for Sustainability

#### Cornell University – Ithaca, NY

*Bachelor of Science in Civil and Environmental Engineering* 2005

- GPA 3.57/4.00 (**Cum Laude**), Chi Epsilon Honors Society
- Semester Abroad, University of Melbourne, Melbourne, Australia, 2004
- Relevant Coursework: Engineers for a Sustainable World, Sustainable Small-Scale Water Supplies, Solving Environmental Problems for Urban Regions

### EXPERIENCE

#### Camp Dresser & McKee (CDM) – Cambridge, MA

*Environmental Engineer* 2005-2008

##### Harvard University Allston Campus

- Delivered sustainable technology assessment to compliment the campus's low-carbon design strategy. Presented findings to 50 employees through teleconference.
- Managed the design development of the utility system; wrote 4 chapters of 13 chapter report. Coordinated submittal of design report and associated CAD drawings.
- Facilitated a multi-discipline (6), multi-consultant (15) project team; led client, agency and subcontractor communications; developed technical reports and \$300,000 budget; managed staff of lower grade levels.
- Technical lead for the evaluation of on-site deep heat geothermal energy; performed a cost analysis and carbon inventory. Wrote 5 of 8 chapters of the feasibility report.
- One of 15 chosen from 4,000 employees to be featured in the company's annual report.

##### Sustainable Wastewater Treatment Plant Design

- Secured a Massachusetts Technology Collaborative (MTC) grant for the feasibility of converting fats, oils and greases to biofuels to jointly reduce a sewer system nuisance and the plant's reliance on fossil fuels.
- Evaluated sustainable features for a wastewater treatment plant upgrade including an assessment of stormwater management, green building design and construction, and potential energy technologies targeted to reduce operating costs. Recommendations included in 30% project design submittal.

##### City of Salem Water Conservation Planning

- Developed water conservation recommendations and a comprehensive implementation plan for the city's Engineering Department.
- Recommendations embraced by the City Mayor. Presented findings to the community at a televised public meeting.

##### Sulabyia, Kuwait Wastewater Treatment Plant

- Evaluated the potential for innovative disposal options for reverse osmosis waste brine at the Sulabyia, Kuwait wastewater treatment plant.
- Specifically evaluated options for wetland treatment, saline farming, irrigation of turf fields, bioreactor landfill water source, phosphorus recovery, and deep well injection.

#### Engineers for a Sustainable World – Ithaca, NY/La 34, Honduras

*Project Team Member* 2004-2005

- Designed a water treatment plant for the small village of La 34, a farming community of approximately 100 families near the northwest coast of Honduras.
- Trained community members to self-sufficiently run the water treatment plant; plant is still operating successfully.

#### Cornell University – Ithaca, NY

*Teaching Assistant/Laboratory Assistant* 2003-2005

- Helped 40 students design, build and automate miniature water treatment plants using LabVIEW software.
- Facilitated a fluid mechanics laboratory including the setup and supervision of hydraulic experiments.

#### University of Southern California/Camp Dresser & McKee (CDM) – Los Angeles, CA

*Sustainable Cities Undergraduate Fellow* 2003

- Worked with a diverse team of students, academics and professionals to incorporate urban sustainability into the development of a rapidly expanding Los Angeles School District school system.
- Recommended sustainable features adopted in a prototype environmental impact report.

### CERTIFICATIONS AND SKILLS

- Engineer in Training, April 2005
- Eligible for Professional Engineering Licensing Exam in 2009
- Hydraulic calculations using MathCAD
- Water Distribution Modeling using H2OMap Water

## Mech Eng Masters Student

XXX Memorial Dr.,  
Cambridge, MA 02139  
XXX-XXX-XXXX xresume2@mit.edu

### Education

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**Massachusetts Institute of Technology** *Cambridge, MA*  
Candidate for Master of Science in Mechanical Engineering, June 2007.  
Relevant coursework: Entrepreneurship Lab, Product Design, Preliminary Venture Analysis, Applied Mathematics for Engineers. GPA: 4.8/5.0

**South Dakota State University (SDSU)** *Brookings, SD*  
Bachelor of Science in Mechanical Engineering, June 2004.  
GPA: 3.97/4.0.

**People's Friendship University** *Moscow, Russia*  
One year course in Russian Language (92-93) in preparation for an MD in Medicine.

### Experience

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**Edelman Lab, MIT** *Cambridge, MA*  
2005-current  
Examined implantation of a medical device (stents) in human arteries. Identified the contribution of geometry as well as material properties of the arterial walls. Drew interpretations by assessing the response of arteries to these devices using numerical techniques (finite element methods).

**Gas Turbine Lab, MIT** *Cambridge, MA*  
2004-2005  
Analyzed a propeller connector (hub) for a vertical test stand to be used in the study and control of low pressure round propellers. Calculated design parameters, and strength evaluation using software such as Patran. Created models using computer aided design tools (Pro-Engineer).

### Skills

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**Computer:** Fortran, Matlab, HTML, UNIX, some JAVA and Visual Basic; Computer aided design: Pro-Engineer, Ideas; Numerical analysis: ADINA, Patran;  
**Language:** Proficient: English, Hindi; Conversational: Russian; Basic French, Korean, Arabic.

### Leadership/Extracurricular

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Managed 150 students as a Resident Assistant at SDSU. Columnist at South Dakota State Univ; Wrote articles in the MIT campus newspaper. Published poem in anthology of new artists.

### Honors/Awards

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Pi Tau Sigma, Tau Beta Pi Engineering Honor societies; Sigma Pi Sigma outstanding Physicist student of the year 2000-2001; Perry W. Williams Prize 2002-2003; Wilton McCown Scholarship 2001-2002.

## Joe Resume

77 Massachusetts Avenue  
Cambridge, MA 02139

Phone: 617-253-XXXX  
Email: XXX@mit.edu

### EDUCATION

**Massachusetts Institute of Technology (MIT), Cambridge, MA**  
*Masters of Science in Computer Science and Mechanical Engineering* **GPA: 5.0/5.0** 2008 (expected)

**Indian Institute of Technology (IIT), Madras, India**  
*Bachelor of Technology, Mechanical Engineering* **GPA: 9.5/10.0** 2005

- Class Rank 1. (**Summa cum Laude**) – secured a gold medal and three silver medals for overall excellence.
- Published paper on manufacturing process control-*Intl. Journal of Manufacturing Technology and Management*
- **Standardized Test Score:** GRE – Verbal: 720/800, Quantitative: 800/800.

### RELEVANT SKILLS

**Software** Excel spreadsheets including Sensitivity Analysis, Monte Carlo simulation, and modeling uncertainties; C, C++, Matlab, Saphire (probabilistic analysis tool) MS Word and MS PowerPoint.

**Courses** Coursework covering fundamentals of finance, economics, statistics, risk-benefit and decision analysis, Options in engineering, and engineering math.

**Projects** Simulated stock prices using Hidden-Markov-Models (Course - Statistics); researched system design optimization techniques as part of a course portfolio (Course - Engineering Options).

### EXPERIENCE

**Osio Corporation, Boston, MA**  
*Business Intern* 2006 - Present

- Developed Excel spreadsheet model for valuation of the start-up's revenue prospects over the next ten years.
- Collaborated with management team in researching and identifying market segments for the new product.
- Currently working on evaluating strategies to be adopted for market deployment and future expansion.

**X Corporation, City, State**  
*Part-time Consultant* 2006

- Optimized and redesigned the system to reduce manufacturing costs by 40% and system size by 20%.
- Appraised final results of analysis to senior management at the client site and at MIT. Conducted weekly client update sessions

**Center for Product Design, Indian Institute of Science, Bangalore, India**  
*Intern for Program in Teaching Innovation* 2003

- Deliberated with professors and fellow students on issues concerning barriers to student learning.
- Identified and specified strategies aimed at teaching innovations and translated them into actionable objectives.
- Implemented a key objective by developing a flexible teaching tool for an advanced graduate course.

**Bharat Electronics Limited, Bangalore, India**  
*Technical Analyst* 2004

- Analyzed a structural component and identified its critical design parameters.
- Redesigned and optimized the component.

### LEADERSHIP

- **Chief Course Coordinator, MIT** – Formulated the syllabus and developed the course content for an undergraduate design engineering course. Organized lectures and led undergraduate assistants in conducting lab tutorials for 200 undergraduate students..
- **Innovative Teaching, MIT:** Formulated new teaching approaches as part of an HP sponsored focus-group trial.
- **Community Service Officer, MIT** – Planned and organized community events for fostering greater interactions amongst graduate students. Received **Outstanding Officer Award** for organizational excellence.
- **Circulation Manager and News Reporter, Graduate Student News Magazine, MIT:** Managed monthly distribution of 5000 copies of magazine on MIT campus. Popularized Cryptic Crosswords at MIT.
- **Mentor, IIT Madras** – Mentored 15 freshmen during the senior year at IIT Madras.

### INTERESTS AND ACTIVITIES

Story-Telling ❖ Cryptic-Crosswords ❖ Teaching Innovations ❖ News Reporting ❖ Tennis ❖ Piano

### HONORS AND ACHIEVEMENTS

Government of India Fellowship (2001-2005) ❖ Certificates of distinction for National Math, Physics and Chemistry Olympiads ❖ Summa Cum Laude in high school ❖ Ranked in top 0.3% for IITs

Political Economy Ave., Cambridge, MA 02139

JEAN UPEG

Phone: (617) xxx-xxxx · Email: Upeg@mit.edu

#### EDUCATION

Massachusetts Institute of Technology (MIT), Cambridge, MA Fall 2009

*Candidate for PhD in Urban Political Economy and Governance*

Dissertation: Out of Control? Local Democracy Failure and Fiscal Control Boards

Princeton University, Princeton, NJ 2001

*B.S.E., Civil Engineering with Architecture, summa cum laude*

#### EXPERIENCE

Community Innovators Lab, MIT, Cambridge, MA 2008–current

*Project Manager, “Innovation and Equity Transform America”; Research Assistant*

- Authored federal taxation memo, coordinated authors, and wrote abstracts for memos to the Presidential Transition Team.
- Drafted grant proposals and policy memos. Participated in designing a model for equitable and comprehensive green retrofits. Currently collaborating with local and national labor and community groups on implementation.

Department of Urban Studies and Planning, MIT, Cambridge, MA 2005–2009

*Teaching Assistant*

- Conducted seminars, graded essays, and contributed to curriculum design. Classes taught totaled over 200 students and comprised a doctoral research seminar, undergraduate policy course, and three masters planning courses. Conceived and taught graduate mini-seminar.

Brookings Institution, Washington, DC 2007–2008

*Brookings Research Fellow*

- Awarded first pre-doctoral fellowship for dissertation research granted by the Metropolitan Policy Program.
- Created a dataset compiled from government sources on municipal finances and socioeconomics. Programmed rare-events regressions to measure the impact of fiscal control boards in small cities. Performed qualitative case studies on the control boards of Miami and Washington, DC through interviews with key actors, archival research, and evaluating financial reports.
- Presented at two national academic conferences for Political Science (7,200 attendees) and Planning (1,000 attendees)

P3 Planning Practice Project, MIT, Cambridge, MA 2004–2005

*Research Assistant*

- Researched four medium-size cities and their innovative community planning organizations. Profiled planners of small cities using national survey data. Created and maintained the project website.

Urban Institute, Urban-Brookings Tax Policy Center, Washington, DC 2001–2004

*Research Associate II; Research Assistant*

- Analyzed tax policy using statistical programs (SAS and Stata), with a focus on the distributional impact of national legislation, the interaction of tax policies and valuation of fringe benefits, and state code relevant to low-income residents.
- Designed, launched, and maintained the Tax Policy Center website for press, policymakers, and researchers. Website received over 12,500 hits per day and was praised by Forbes, National Journal, and Business Week.

New York City Nonprofits Project, New York, NY 2000–2001

*Research Assistant*

- Developed a strategy to determine the economic impact of the non-profit sector on the city.

Professor Julian Wolpert, Princeton University, Princeton, NJ 2000

*Research Assistant*

- Wrote a memo detailing the spillover effects of non-profits and value of non-profit tax exemption, focused on Philadelphia.

#### FELLOWSHIPS AND AWARDS

National Science Foundation Graduate Research Fellow, 3 years (2005-2009); MIT Presidential Graduate Fellow and Department Fellowship, 3 years (2004); Civil and Environmental Engineering Book Award and David W. Carmichael Prize, Princeton (2001).

#### PROFESSIONAL AND PUBLIC SERVICE

Student representative, PhD Committee, Department of Urban Studies and Planning, MIT (2004-2007); Graduate Resident Tutor, MIT (2006-2007); High school tutor, Maya Angelou Public Charter School, Washington, DC (2003-2004); Tax preparer for low income households, Community Tax Aid (2003) and Lincoln Park Baptist Church (2002), Washington, DC.

#### PUBLICATIONS AND CONFERENCES

2 first author; 10 co-author; 2 conference presentations; 1 first author manuscript under review (refereed).

## Ph.D. Interested in Consulting

Rm. 12-170, M.I.T., 77 Mass Ave. • Cambridge, MA 02139 • Phone: 617-XXX-XXXX • Email: imastudent@mit.edu

<b>Education</b>	<b>MASSACHUSETTS INSTITUTE OF TECHNOLOGY</b> <b>Candidate for Ph.D. degree in Material Science &amp; Engineering, June 2002</b> Used stochastic simulation techniques to gain new insights into polymer structure. Established collaboration with experimental group in the Mechanical Engineering Dept. Pursuing unique integrated approach to develop new molecular models better suited to designing optimal industrial processes. <i>GPA: 4.9/5.0</i> <b>Minor: Business Administration at the Sloan School of Management, MIT</b> <b>Business Courses:</b> Management of Innovation and Technology, International Management, Entrepreneurship, Microeconomics, Macroeconomics, Management and Policy in the International Economy, Marketing, Finance Theory, Options and Derivatives, Investment Banking, Operations Research, <b>all with grade A.</b> <b>Master of Science in Chemical Engineering Practice, January 1999.</b>	<b>Cambridge, MA</b>
	<b>TRINITY COLLEGE, CAMBRIDGE UNIVERSITY</b> <b>Master of Engineering, June 1996</b> <b>Bachelor of Arts with Honors in Natural Science and Chemical Engineering, June 1995</b>	<b>United Kingdom</b> Class Rank: 2 Class Rank: 1
<b>Experience</b>	<b>INDUSTRY INTERNSHIPS</b> <b>MERCK PHARMACEUTICALS (Summer 1998)</b> <i>Team Leader:</i> Found systematic method to raise glass transition temperature of vaccines. This allowed a higher storage temperature for the vaccines. Generated \$5million annual saving in refrigeration costs.	<b>West Point, PA</b>
	<b>DOW CHEMICALS (Summer 1997)</b> <i>Intern:</i> Wrote software for simulating complex distillation processes, adopted throughout Dow Chemicals.	<b>Plaquemine, LO</b>
	<b>DOW-CORNING (September-November 1997)</b> <i>Team Leader:</i> Removed a bottleneck to allowing doubling of a plant's capacity. \$10million capital savings.	<b>Midland, MI</b>
	<b>UNITED KINGDOM ATOMIC ENERGY AUTHORITY (Summers, 1992-1995)</b> <i>Intern:</i> Worked for fluid mechanics groups on technical consulting projects for the petroleum industry. Frequently delivered presentations to clients. Incorporated new algorithms into pipeline simulation modules and achieved tenfold increase in speed. Developed strategies to reduce pipeline erosion. Improved reliability of flowrate measurement devices in oil pipelines to allow clients to better monitor throughputs.	<b>United Kingdom</b>
<b>Leadership</b>	<b>MIT PRESIDENT, STUDENT LEADERSHIP COUNCIL OF MATERIAL SCIENTISTS (2000 - present)</b> Leader in group of 200 students that promotes collaboration between five major research universities. Organized videoconferences to allow students to share research ideas. Planning summer retreat to further student collaboration. Investigating ways to promote science and technology in secondary schools and the community. <b>STUDENT REPRESENTATIVE, MIT MATERIAL SCIENCE &amp; ENGINEERING DEPT. STUDENT AFFAIRS COMMITTEE (1999 - present)</b> Leading student / faculty discussion on ways to enhance student / advisor interaction. <b>TEACHING ASSISTANT, MIT MATERIAL SCIENCE &amp; ENGINEERING DEPT. (Fall semester 1999)</b> Organized tutorials to clarify course material. Wrote instruction manual to help students use math software. Class scored 7% higher in final than any of the professor's former classes. <b>U.K. COORDINATOR, EUROPEAN CLUB CAREER FAIR (1998)</b>	
<b>Awards, Honors</b>	<b>Winner of National Science Foundation Poster Competition (2000); Sigma Xi Engineering Research Honors Society (1997); Harvey Stern Fellowship, MIT (1996); Fox Prize for Outstanding Performance in Chemical Engineering, Cambridge University (1996); Verhaydn de Lancy Prize for Outstanding Contribution to Trinity College (1995); Mobil Prize for Best Performance in Chemical Engineering, Cambridge University (1995); Senior Scholarship for Outstanding Academic Performance, Trinity College, Cambridge (1994); Student Scholarship, United Kingdom Atomic Energy Authority (1992-1996)</b>	
<b>Activities</b>	Dancing (MIT Salsa Club), Classical Guitar, MIT Debating Club, MIT European Club Soccer Team	

## Ph.D. Resume for Industry Position

### ANONYMOUS STUDENT

100 Any Ave., Cambridge, MA 02140  
home 617-XX-XXXX, mobile 617-XXX-XXXX, anonymous@mit.edu

**Objective** Associate position in environmental consulting applying geochemical knowledge and gaining experience in environmental economics and regulations.

#### Education

- 1995- Jan. 2002 **MASSACHUSETTS INSTITUTE OF TECHNOLOGY** Cambridge, MA  
Ph.D. Department of Earth, Atmospheric and Planetary Sciences.  
• Thesis: Petrology and Geochemistry of High Degree Mantle Melts.  
• Combined thermodynamic, trace element, and geodynamic models to constrain complex melting processes.
- 1991-1995 **HARVARD UNIVERSITY** Cambridge, MA  
B.A., Dept. of Earth and Planetary Sciences, Cum Laude.  
• Broad geology coursework including surface processes and sedimentary petrology.

#### Experience

- Jan. 2002-present **BOSTON UNIVERSITY** Boston, MA  
LECTURER. Department of Earth Sciences.  
• Course: Introduction to Geochemistry. Covers igneous and environmental geochemistry, element transport mechanisms, and kinetics.
- Jan. 2002-present **MASSACHUSETTS INSTITUTE OF TECHNOLOGY** Cambridge, MA  
POSTDOCTORAL RESEARCHER. Dept. of Earth, Atmospheric and Planetary Sciences.  
• Estimating pressure and temperature conditions beneath the Aleutian Islands using combination of experimental observations and thermodynamic modeling.
- 1995-2002 **MASSACHUSETTS INSTITUTE OF TECHNOLOGY** Cambridge, MA  
RESEARCH ASSISTANT. Dept. of Earth, Atmospheric and Planetary Sciences.  
• Constructed thermodynamic computer code (MatLab) to predict the distribution of major elements in solid and fluid phases during melting of the interior of the Earth.  
• Modeled trace element distribution in geologic samples.  
• Constructed geophysical model of mantle convection using existing finite-element code.  
• Developed experimental and analytical techniques to provide data for models.  
• Taught lab section of courses in Mineralogy and in Igneous and Metamorphic Petrology.  
• Mentored 5 undergraduate research projects in geochemistry.
- 1994-1995 **HARVARD UNIVERSITY** Cambridge, MA  
UNDERGRADUATE RESEARCHER. Dept. of Earth and Planetary Sciences.  
• Constructed compositional model of the Earth's deep interior by comparing theoretical seismic velocity of experimental charges with observed seismic velocities.  
• Performed and analyzed ultra-high pressure experiments.

#### Skills

**Computer:** MatLab, some HTML and VBA, convection modeling using pre-existing finite element code, PC and Mac spreadsheet, text, and drawing programs (Illustrator, Canvas,...)  
**Analytical:** Electron microprobe, ion microprobe, XRF, ICP-MS.

**Awards/Activities** National Merit Scholarship (1991-1995), Best Senior Thesis - Harvard Geology Club (1995). Officer - Harvard Geology Club (1994-1995), Chairman of Board - Agassiz Cooperative Preschool (1998-1999), ultimate, basketball, hiking, gardening, reading.

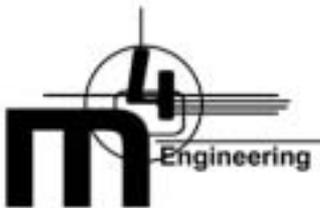
#### Publications

2 first author (refereed), 1 co-author (refereed), 8 conference presentations, and 5 co-author on presentation abstract. A detailed list of publications is available upon request.

# Differences Between a CV and Resume

Category	Curriculum Vitae	Resume
<b>What is it?</b>	A full list of your professional and educational history.	A summary of your experience and skills that are most pertinent to the advertised position.
<b>How long is it?</b>	Usually many pages; length is not important.	Usually one page only. Multiple pages only for senior level positions.
<b>When do you use it?</b>	Used for academic positions and research positions in government and industry.	Used for every other type of job outside of academia and research science.
<b>Do you include your publications?</b>	A full list of publications is essential.	Even a partial list of publications is rarely included.
<b>How important is style and layout?</b>	Style doesn't matter that much; content is what matters most.	Style and content are important. Bad style is a real liability.
<b>Should I modify it to match each specific job to which I am applying?</b>	CVs do not need much alteration to fit each specific job opening.	Resumes should be adapted to fit each specific job to which you are applying.
<b>Are references listed?</b>	Typically references are listed at the end of the CV.	References are not listed on a resume. If required, you may submit a separate list of relevant references for each position (usually only when these are requested.)

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**M4 Engineering** is a dynamic and rapidly growing high technology analysis and consulting company. **M4 Engineering** leads a productive team that supplies innovative technical solutions focused on analysis, optimization, and software development. We are currently seeking highly organized, enthusiastic individuals to join our engineering organization. The successful candidate will have the opportunity to work with a dynamic team performing engineering research and development for Department of Defense, NASA, and commercial clients.

## Opportunities

Engineers are needed to perform:

- Structural/Aerodynamic/Thermal/ Propulsion analyses
- Multidisciplinary Analysis and Optimization
- Engineering systems analysis
- Engineering software development

Successful candidates shall exhibit:

- Strong technical aptitude
- Strong communication skills
- Strong teamwork skills
- Full time employees and interns will be considered
- US Citizen or permanent residents only



**M4 Engineering, Inc.,** Long Beach, California, [jobs@m4-engineering.com](mailto:jobs@m4-engineering.com)

# Sample CV #1

See Industry Resume version of this CV on page 30.

Anonymous Student 1 - Page 2

- Modeled the flow of mantle in subduction zones using pre-existing finite element codes. This geodynamic study was combined with petrologic data to constrain the temperature and viscosity structure of the sub-arc mantle.
- Determined the solubility of He in olivine with the goal of understanding the extent of degassing and convection in the deep mantle.
- Other experimental projects include the solubility of Fe in AuPd alloys, textural studies of komatiites, and development of the multi-anvil device at MIT. (1997-Jan. 2004)

## Harvard University, Department of Earth and Planetary Sciences

- Advisor: Advisor Name  
Cambridge, MA
- Constrained the composition of the mantle transition zone by comparing observed and predicted seismic velocities.
  - Work involved running ultra-high pressure (up to 2.3 GPa) phase equilibrium experiments and analyzing results with electron microprobe. The measured phase proportions and compositions were used to calculate the seismic velocities of the mantle at transition zone pressures. The calculations were used to evaluate various compositional models. (June, 1995 - June, 1997)

## Teaching Experience

- Boston University, Department of Earth Sciences** Boston, MA  
Introduction to Geochemistry. Lecturer (1 term replacement position).
- Responsible for entire curriculum. Developed a coherent framework under which the disparate fields of high-temperature igneous geochemistry and low-temperature aqueous geochemistry could be seen as different applications of the same geochemical principles.
  - Initiated use of computer modeling in teaching geochemical principles. Have focused on teaching students fungible geochemical skills. (Jan. 2004-present)

- MIT, Dept. of Earth, Atm. and Planet. Sciences** Cambridge, MA  
Mineralogy. Teaching Assistant.  
Responsible for teaching lab component of class. Assisted in development of lab curriculum. Updated and revised existing lab assignments. (Fall, 2001)

- MIT, Dept. of Earth, Atm. and Planet. Sciences** Cambridge, MA  
Igneous, Metamorphic, and Sedimentary Petrology. Teaching Assistant.  
Responsible for teaching lab component of class. Assisted in development of lab curriculum. This was the first time this class was taught. Previously existed as three separate classes. Challenge was to compress three semesters of work into one, while sacrificing as little content as possible. (Fall, 1999)

- MIT, Dept. of Earth, Atm. and Planet. Sciences** Cambridge, MA  
Beyond the Solar System. Teaching Assistant.  
Assisted with labs. Graded homework assignments. (Spring, 1998)

Anonymous Student 1, Grove TL, Dann JC (Kaapvaal conference, 2003) The generation of Barberton komatiites in an Archean subduction zone.

## Presentations

## ANONYMOUS STUDENT 1

Business Address:  
Massachusetts Institute of Technology  
Bldg. XX-XXX  
Cambridge, MA 02139  
(617) 253-0000

Home Address:  
0 Imaginary Ave.  
Cambridge, MA 02140  
(617) 000-0000  
student@mit.edu

## Education

- Massachusetts Institute of Technology** Cambridge, MA  
Postdoctoral Researcher. Department of Earth, Atmospheric and Planetary Sciences.  
Research focuses on the production of magmas in the Aleutian arc using experiments and geochemical modeling.
- Massachusetts Institute of Technology** Cambridge, MA  
Ph.D. Department of Earth, Atmospheric and Planetary Sciences, January 2004.  
Thesis: Petrology and Geochemistry of High Degree Mantle Melts.

## Harvard University

BA, Earth and Planetary Sciences, Cum Laude, June 1997. Senior Thesis: The Predicted Seismic Velocity of the Mantle Transition Zone Based on High Pressure Phase Equilibria Experiments.

## Awards

National Merit Scholarship (1993-1997). Awarded best senior thesis by Harvard Geology Club (1997).

## Research Experience

- MIT, Department of Earth, Atmospheric and Planetary Sciences** Cambridge, MA  
Advisor: Advisor Name
- Currently quantifying the pressure, temperature, and composition of the source region of Aleutian arc magmas. Focus is on the effect of water on phase relations.
  - Work involves high pressure experiments, analyses of experimental charges, and geochemical modeling of data. (Jan. 2004-present)

## MIT, Department of Earth, Atmospheric and Planetary Sciences

- Advisor: Advisor Name  
Cambridge, MA
- Experimentally determined the thermodynamic effect of water on high degree mantle melting.
  - Incorporated experimental data into a predictive thermodynamic model of hydrous mantle melting.
  - Estimated the secular cooling of the Earth's mantle by applying predictive model to subduction magmas from 0 to 3.5 Ga.
  - Employed trace element modeling to estimate the effect of metamorphism on Barberton komatiite bulk samples and to constrain their tectonic setting.

- Anonymous Student 1, Grove TL, Dann JC (Komatiites, Norites, Boninites and Basalts, 2002) Petrologic and experimental evidence for high H<sub>2</sub>O contents in Barberton komatiite magmas.
- Anonymous Student 1, Grove TL (Goldschmidt, 2002) Compositional effects of H<sub>2</sub>O on ol-opx saturated melts.
- Dann J, de Wit M, Grove TL and Anonymous Student 1 (IAYCEI, Cape Town, 2001) Segregation vesicles in 3.5 Ga komatiites: Barberton, South Africa.
- Anonymous Student 1, Grove TL (Spring AGU, 2001) High pressure water undersaturated liquidus phase relations of komatiite from the Barberton Mountainland, South Africa.
- Anonymous Student 1, Holzheid AD, Grove TL (First International Pressure Calibration Workshop, 2000) Precision and accuracy of pressure in a Walker style multi-anvil device.
- Grove TL, Gaetani GA, Anonymous Student 1, Elkins LT (Materials Recycling near convergent plate boundaries, Carnegie Inst. of Washington, Puerto Azul, Philippines, 2000) Mass transfer processes in the southern cascade subduction zone: the influence of variable water content on mantle melting.
- Grove TL, Gaetani G., Anonymous Student 1, Dann J, de Wit M (Spring AGU, 1999) Origin of spinifex textures in 3.49 Ga komatiite magmas from the Barberton Mountainland, South Africa.
- Anonymous Student 1, Grove TL, Dann J, de Wit M (Spring AGU, 1999) Pyroxene compositions in 3.49 Ga Barberton komatiite: evidence of variable H<sub>2</sub>O contents.
- Anonymous Student 1, Grove TL, Shimizu N, Dann J, de Wit M (Fall AGU, 1999) Mafic trace and minor element abundances in Barberton komatiites inferred from augite compositions.
- Anonymous Student 1, Grove TL, Dann J, de Wit M (Spring AGU, 1998) Quantitative estimates of the chemical composition and liquidus temperatures of komatiite magmas from the Barberton Mountainland, South Africa.
- Agee CB, Anonymous Student 1 (Fall AGU, 1996) Upper mantle transition zone: a remnant of primordial differentiation?
- Agee CB, Li J, Anonymous Student 1 (Spring AGU, 1996) P-T phase diagram for the Allende Meteorite.

**Publications**

- Anonymous Student 1, Grove TL, Dann JC, and de Wit MJ (accepted, Feb. 2004) *Boninites, komatiites, and Archean subduction zones*. Geophysical Research Letters.
- Grove TL, Anonymous Student 1, and Dann JC (2002) *Conditions of magma generation for Archean komatiites from the Barberton Mountainland, South Africa*. In *Mantle Petrology: Field Observations and High Pressure Experimentation: A tribute to Francis R. (Joe) Boyd*. The Geochemical Society, Special Publication 6, Y Fei, C.M. Bertka and B.O. Mysen, eds., p. 155-167.
- Anonymous Student 1, Dann JC, Grove TL, and de Wit MJ (2000) *Emplacement conditions of komatiite magmas from the 3.49 Ga Komati formation, Barberton Greenstone Belt, South Africa*. Earth Planet. Sci. Lett. 150, p. 303-323.
- Member, American Geophysical Union, 1997-present. Communications Director, Friends of Cambridgeport School, 2001-present. Chairman of the Board, Agassiz Cooperative Pre-School, 2000-2001. Officer, Harvard Geology Club, 1996-1997.
- Dr. Who**  
Department of Earth, Atmospheric, and Planetary Sciences  
Massachusetts Institute of Technology  
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who@mit.edu
- Dr. Blank**  
Department of Geology and Geophysics  
Woods Hole Oceanographic Institution  
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- Dr. Anonymous**  
Department of Earth, Atmospheric, and Planetary Sciences  
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**Activities**

**References**

## Sample CV #2

Teaching Experience	<p><b>Caltech, Department of Chemistry</b> Organic Chemistry, Teaching Assistant. Helped write problem sets and exams. Assisted students individually with homework problems or material they found difficult to understand. (September 1999 - June 2000)</p> <p>Introductory Chemistry, Head Teaching Assistant. Prepared teaching materials including problem sets and exams. Supervised other teaching assistants and graders. Addressed individual students' questions and needs. (January - June 1998)</p> <p>Organic Chemistry Laboratory, Teaching Assistant. Supervised and instructed students in organic chemistry techniques. Emphasized keeping complete and accurate scientific notes. (January - June 1995)</p> <p><b>Howard University Department of Chemistry</b> Laboratory Techniques in Organic and Inorganic Chemistry, Teaching Assistant. Supervised and assisted students with multi-step syntheses of compounds designed to teach general laboratory techniques. (January - June 1995)</p>	Pasadena, CA
Presentations	<p>"Recognition of 5'-(A,T)GG(A,T)2-3' Sequences in the Minor Groove of DNA by Hairpin Polyamides," J. Doe, E.E. Cummings, and J.J. Reynolds, Western Biotech/ACS Regional Conference in San Diego, CA, October 19, 1999.</p> <p>"Synthesis and DNA Binding Studies of Imidazole-Containing and Amidine-Linked Analogs of Distamycin A," J. Doe, A.L. Brown, and M. Kinney, Fifth National Conference on Undergraduate Research in Pasadena, CA, April 1995.</p>	
Publications	<p>"Optimization of the Hairpin Polyamide Design for Recognition of the Minor Groove of DNA," J. Doe, B.B. Cummings, and J.J. Reynolds, Journal of the American Chemical Society, 2000, 5, 118, 1047.</p> <p>"Recognition of 5'-(A,T)GG(A,T)2-3' Sequences in the Minor Groove of DNA by Hairpin Polyamides," J. Doe, B.B. Cummings, J.J. Reynolds, Journal of the American Chemical Society, 2000, 118, 6153.</p> <p>"Simultaneous Binding of Polyamide Dimers and Oligonucleotides in the Minor and Major Grooves of DNA," J. Doe, J.J. Reynolds, Bioorganic Medical Chemistry, 2000, 5, 1045.</p> <p>"Cyclic Polyamides for Recognition in the Minor Groove of DNA," L. Lyne, J. Doe, J.J. Reynolds, Proceedings of the National Academy of Sciences, USA, 1999, 93, 10389.</p>	
Activities	<p>Officer, Member, MIT Association of Postdoctoral Women, Member, American Chemical Society, 1993-present, Organized Organic Chemistry Seminar Series at Caltech, 1996-97, Volunteered at the Hunting Memorial Hospital Extended Care, Member, Howard University Marching and Symphonic Bands, Interests include traveling, reading, running marathons, hiking, backpacking, and cooking.</p>	
References	<p>Professor X Chair, Chemistry Department MIT 77 Massachusetts Ave., 11-22 Cambridge, MA 02139 617-253-0000 x@mit.edu</p> <p>Professor Y Department of Chemistry MIT 77 Massachusetts Ave., 11-21 Cambridge, MA 02139 617-253-1111 y@mit.edu</p> <p>Professor Z Department of Chemistry California Institute of Technology 400 Rodeo Drive, 44-50 Pasadena, CA 55882 908-570-0000 z@caltech.edu</p>	

Jane Doe	<p><b>Business Address</b> Massachusetts Institute of Technology 89 Ames Street 61-210 Cambridge, MA 02139 (617) XXX-XXX jdoe@mit.edu</p> <p><b>Home Address</b> 10 Home Street Apt. # 2D Cornish, NH 03745 (603) XXX-XXX</p> <p><b>Massachusetts Institute of Technology</b> National Institutes of Health Postdoctoral Fellow, Department of Chemical Engineering, Research focuses on encapsulation of ribonucleic acid (RNA) into polymer nanospheres for delivery to human cells. (August 2000-present)</p> <p><b>California Institute of Technology</b> Ph.D. Department of Chemistry, May 2000. Thesis: Sequence-Specific Recognition of DNA in the Minor Groove by Imidazole and Pyrrole-Containing Polyamides.</p> <p><b>Howard University</b> Bachelor of Science, Chemistry, Magna Cum Laude, April 1995. Participated in summer undergraduate research program resulting in thesis and presentation. Thesis: Synthesis of Imidazole-Containing and Amidine-Linked Analogs of Distamycin.</p> <p><b>Kansai Gaidai</b> Foreign exchange student. Studies included Japanese language and intercultural communication. Lived with a Japanese family. (August - December 1994)</p>	Pasadena, CA
Awards	<p>Carolyn Vogel Chemistry Scholarship (2001), Howard Advantage Student (1994), Phi Beta Kappa (1994), General Electric Fellowship (1995-1996), National Institutes of Health Postdoctoral (2000).</p>	
Research Experience	<p><b>MIT Department of Chemical Engineering</b> Advisor: John Smith Currently developing methodology for ribonucleic acid encapsulation in nanosphere particles using biodegradable polymers for ultimate use in gene therapy applications. Examining methods for chemical derivatization of the polymer/RNA nanospheres for targeting specific cell types. Work involves polymer synthesis and characterization, GPC, cellular targeting. (August 2000 - present)</p>	Cambridge, MA
<b>Caltech Department of Chemistry</b>	<p>Advisor: Brian Jones Explored sequence-specific recognition of minor groove of double-helical DNA-binding properties through polyacrylamide gel electrophoresis. Results from this work expanded sequence repertoire available to pyrrole-imidazole polyamides and provided general criteria for design of future sequence-specific DNA-binding polyamides. Determined compatibility of oligonucleotide and a polyimide binding simultaneously in the major and minor grooves, respectively. Techniques used include synthesis, NMR spectroscopy, HPLC, column chromatography, polyacrylamide gel electrophoresis, solid-phase peptide synthesis including HF cleavage and deprotection, oligonucleotide synthesis and purification, radioactive labeling of DNA, cloning specific sequences into plasmids, DNA sequencing. (September 1995 - May 2000)</p>	Pasadena, CA
<b>Howard University, Department of Chemistry</b>	<p>Advisor: Phillip Grey Synthesized analogs of the natural product distamycin A, which binds to DNA in the minor groove. Synthesis involved imidazole chemistry with amidine linkages and end groups for electrostatic interaction with DNA. (June - August 1994)</p>	Washington, DC

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## Cover Letters

You will have to write a number of letters to employers while looking for a job. One type of letter is the cover letter, which you send with your resume when you are requesting a job interview. Other letters are those you write following up interviews, arranging company site visits, and accepting or rejecting job offers. See the examples on the next pages. Here are some tips:

- State clearly in your opening sentence the purpose for the letter. Then use the rest of the letter to support your candidacy.
- Be sure that each cover letter is specifically tailored to the company to which you are writing. Research the company to help you determine your approach. Check the company's website and other resources on the Internet.
- If you are seeking a position that is a departure from or an unexpected application of your academic training—for example, you are an electrical engineer who wants to use his/her quantitative skills in a finance or consulting position—be explicit about why you are interested in that particular field, organization or job, and what value you bring. Do not leave the reader wondering, "Why is an electrical engineer writing to me, the personnel manager of McKinsey?"
- If you are applying for a summer job and do not yet have any experience that is directly related to the position, focus on telling the employer what experience you do have that may be of interest.
- Always try to write to a specific individual and include the job title. Do not address your letter to "Dear Sir or Madam."
- Ask someone else to check your grammar, spelling, and style. When proofreading your own writing, it is easy to overlook silly mistakes.

### Suggested Formula for Cover Letter

September 1, 2008	77 Massachusetts Ave. Cambridge, MA 02139
Mr. John Doe College Relations Coordinator Technology Corporation, Inc. 11 Beacon St., Suite 7 Boston, MA 02134	
Dear Mr. Doe:	
First Paragraph: Introduce yourself by stating your degree program and the year in which you will graduate. Specify the type of position you are seeking (e.g., summer internship, full-time position). Tell why you are writing, and name the position, field, or general vocational area in which you are interested. Tell how you heard of the opening or organization (e.g., the job posting on MIT's CareerBridge, or the career section of the company's website, or through a faculty recommendation.)	
Second Paragraph: Mention one or two qualifications you think would be of greatest interest to the employer. Tell why you are particularly interested in the company, type of work or location. If you have related experience or specialized training, point it out. Refer the reader to the enclosed resume, which will give additional information concerning your background and interests.	
Third Paragraph: Close by stating your desire for an interview. You may say that you will phone in a week or so to request an appointment. Make sure that your closing is not vague, but makes a specific action from the reader likely.	
Sincerely,	
Jane Doe	

## Sample Undergraduate Management Consulting Cover Letter

Jane Doe  
XXX Memorial Drive  
Cambridge, MA 02139  
janedoe@mit.edu  
(617) XXX-XXXX

Recruiter's Name  
Campus Recruiter  
Company Name  
Company Address  
Boston, MA 02116

June 24, 2007

Dear Campus Recruiter:

I am a senior at MIT majoring in biology with a concentration in management from Sloan Business School. I was extremely impressed with Deloitte's approach to consulting after speaking with Yelena Shklovskaya. Deloitte is unique in having the ability to form diverse teams to tackle all the problems a client may have. As a member of the Strategy & Operations group, I may have the opportunity to meet and work with a variety of people in this consulting group, in other areas of consulting, and outside of consulting as well. In particular, I like the amount of attention and dedication that Deloitte puts into working with its clients, not only by devising effective strategies to address the clients' problems, but also by often implementing the recommendations on-site. Therefore, I am writing to request an invitation to interview for a Business Analyst position with Deloitte.

In the past two years, I have been involved in strategy consulting, pharmaceuticals, and government affairs for a non-profit healthcare organization. This summer, I worked in strategy consulting for Putnam Associates. My 6-member team evaluated the marketing efforts for a major pharmaceutical company's organ transplant drug. Through my management of recruitment and interviews with 98 physicians, I obtained primary research and analyzed it on national and regional levels to recommend and help implement improvements in the client's marketing plan. I learned how to work in a deadline-oriented environment, held responsibility for large segments of a team project, and enhanced my quantitative skills through analysis of primary and secondary research data. In addition, I conducted independent research to form recommendations when launching a drug that follows a related product, and I presented these key considerations to all Putnam employees.

I have been a volunteer in public policy for 7 years with the March of Dimes Birth Defects Foundation. I lobbied Senators at both the Massachusetts and California State Capitols, as well as on Capitol Hill in Washington, D.C. Lobbying has taught me negotiation skills, the need for contingency plans, and the ability to make quick yet innovative decisions. Two years ago, I was appointed Director of Massachusetts Youth Public Affairs and asked to be a member of the state's Public Affairs Council. My responsibilities include developing, organizing, and implementing the Foundation's annual public policy objectives in an ultimately results-driven environment.

Through my experience with Putnam Associates and the March of Dimes, along with my modeling work in the MIT Sloan Business School, I used my management skills to negotiate and consult with others, analytically design a successful plan, and execute my ideas. I am confident that I can bring my strong, diverse technical and business background to best fit the current needs and future ventures of Deloitte.

I welcome the opportunity to speak with you about my qualifications and ways that I can contribute to Deloitte. Thank you and I look forward to hearing from you soon.

Sincerely,

*Jane Doe*

Jane Doe

## Sample Cover Letter

Your Name  
Address  
Boston, MA 02215

February 10, 2007  
Engineering Manager  
Company Name  
Address  
Los Angeles, CA 92008

Dear Engineering Manager,

I will be graduating from MIT in June with a Bachelor's degree in Mechanical Engineering and am interested in opportunities at (name of company). I got your name from (website/ ICAN/other contact person). I am excited about the direction (name of company) is headed and read from your website that you are continually producing innovative products and quality customer service.

I feel that my experiences in both the workplace and at MIT have given me the skills to make a valuable contribution to a future employer. I have taken courses in product design and development, manufacturing, mechanical design, and management in engineering, in addition to MIT's general Mechanical Engineering course requirements. My thesis project is a cataract cryoprobe prototype that should make a significant impact in third world countries, because both doctors as well as trained medical technicians can administer this procedure. This past summer at the Natural Energy Institute, I designed a polycarbonate pressure vessel that will be used for deep-ocean alternative energy simulations.

I would very much like to speak with you further about how I can make a valuable contribution to (your company). Please feel free to contact me by phone at (617) 555-5555 or by email at student@mit.edu. I look forward to hearing from you soon.

Sincerely,

Your Name

Student Enviro Eng  
Environment St.  
Cambridge, MA 02139

March 20, 2009

Joan Dough  
77 Massachusetts Avenue  
Cambridge, MA 02139

Dear Ms. Dough

I am a 2009 degree candidate for a Master of Engineering in Environmental Engineering from Massachusetts Institute of Technology. In addition, I received my Bachelor of Science in Civil and Environmental Engineering from Cornell University in 2005. Before pursuing my graduate studies, I worked as a consultant at Camp Dresser and McKee for three years applying my skills to a range of projects including sustainable technology assessments and management of multi-disciplinary, multi-consultant project teams. Based on my work and educational experience, and perhaps more importantly because of my interest and enthusiasm, I think I am well suited to pursue a career in sustainability consulting.

I have a keen interest in the field of global warming and greenhouse gas management. I am currently pursuing this interest through my thesis work: a carbon impact evaluation of proposed hydropower in Chilean Patagonia. During my time as a consultant, I was able to distinguish myself as a proficient and motivated employee. In particular I sought to engage in projects that focused on renewable energy, sustainable design, and energy efficiency. I was also involved in promoting sustainable practices within the company, and initiated an educational conference for public sector clients.

My experience includes: delivering a sustainable technology assessment to compliment a campus' low-carbon design strategy; evaluating the conversion of waste oils to biofuels at a local wastewater treatment plant; and conducting a cost analysis and carbon inventory for the design of a deep heat geothermal energy facility. Therefore, I am highly confident that I can use my skills, knowledge, and enthusiasm to help businesses develop and implement sustainability initiatives.

I welcome the opportunity to speak with you further about potential career opportunities. I can be reached at (617) xxx-xxxx or EnviroEng@mit.edu.

Sincerely,

Student Enviro Eng

7 Consultant Ave.  
Cambridge, MA 02139  
(617) XXX-XXXX  
ceestudent@mit.edu

December 7, 2007

Mr. Phillip Norse  
McKinsey & Company, Inc.  
10 Innovation Drive  
Orange County, CA 92617

Dear Mr. Norse,

I am a candidate for Master of Science in Civil and Environmental Engineering at MIT, with a concentration on decision analysis in complex engineering systems. I read your email regarding Operations Practice and talked to Ms. ABC from the Istanbul Office. I am very interested in joining “the Firm” as an Operations Analyst. I believe that a career in management consulting at McKinsey will provide the learning environment and the business exposure necessary to grow as a powerful leader who can see the “big picture”.

Being at MIT has given me exceptional opportunities to broaden my vision through a wide-variety of courses from both engineering and management disciplines. Throughout my research studies, I applied those principles to develop dynamic investment strategies for large-scale oil development projects. From the technical perspective, I have gained extensive knowledge in complex decision analysis, stochastic modeling, optimization and software development. More importantly, I developed strong interpersonal skills from working closely with many people with different backgrounds, both in academia and industry. One notable experience is my research presentation to the senior executives from BP, which funded my research project for two years. I learned a great deal about communicating highly technical analysis to business people, which I believe is extremely important in management consulting.

Beyond my academic endeavors, I built a successful career as a professional tennis player where my commitment to excellence, passion and hard work helped me win the title of “Turkish Tennis Champion” for four consecutive years and gave me the honor to represent my country on the international arena. I learned to become successful in a competitive environment, to stay committed and to think strategically. Also, I developed many personal skills from involving myself in extracurricular activities. I took initiative in organizing the yearbook activities in college where I gained significant leadership skills such as defining group objectives for a better team alignment and building trust among various entities. I am confident that all these skills will enable me to add value to my role as a successful consultant at McKinsey.

I am particularly interested in McKinsey & Company because it provides a great opportunity to have a world-shaping impact while solving the most challenging problems of the leading institutions all around the globe. Operating as “one firm” is one of McKinsey’s most distinctive characteristics, which helps it to become a true learning organization. I am eager to be a part of this international network, learn from the experiences of people at McKinsey and contribute to your company through my strong personality.

I would appreciate the opportunity to speak with you further about my qualifications and discuss how I can contribute to McKinsey. Thank you for your time and consideration.

Best Regards,

Civil Enviro Eng Student

## Sample Cover Letter

Your Name  
000 Memorial Drive, # 0000  
Cambridge, MA 02139

August 25, 2007

Professor XXXX  
Search Committee, IT 989  
Department of Mechanical Engineering  
University of XXX  
Address  
City, State Zip

Dear Professor XXXX:

I am responding to your advertisement for a faculty position in the Department of Mechanical Engineering at University of XXX. I graduated from the Department of Aeronautics and Astronautics at MIT in June with a Doctor's degree, and am currently working as a Postdoctoral Associate at MIT in the Department of Aeronautics and Astronautics. My thesis work is in the area of active structural acoustic control using smart structures technology, and my specific research topic is the development of a new wavenumber domain sensing method for active structural acoustic control. My thesis advisor is Professor X in the Department of Aeronautics and Astronautics at MIT.

For my Ph.D. dissertation, I have worked on the development of the structural-acoustic control algorithms and their implementation for the reduction of radiated noise from vibrating underwater vehicles. The Office of Naval Research, with an objective of developing "smart" underwater vehicle systems so that the enemy cannot detect their attack in advance, has funded this project. My responsibility in this project is to develop the new technology to reduce the radiated noise from vibrating underwater vehicles. In order to accomplish this, I have developed a new wavenumber domain sensing method and applied it to the real-time estimation of acoustic power and the design of feedback controller for active structural acoustic control of the general complex structures. Furthermore, I have designed and experimentally implemented local and global controller architectures with different configurations to find the best controller configuration for the new underwater vehicle system.

I would like to continue my research on active structural control and active structural acoustic control for complex systems, including aerospace systems (aircrafts, helicopters) and underwater vehicles (submarines, torpedoes). I will carry out research on structure/fluid/control interaction phenomena and advanced sensor/actuator development using smart structures technologies. Also, I will extend my research to the development of advanced control design techniques for noise and vibration reduction of complex systems.

My ultimate research goal is to develop "intelligent structural systems", which will contain arrays of sensors and actuators, and embedded devices for controls and decision-making algorithms, so that those systems can coordinate large numbers of devices and adapt themselves to uncertain environmental changes in an intelligent manner. I believe my extensive research experience and specialization in structural dynamics and controls will allow me to continue my research in those areas.

I have enclosed my curriculum vitae with a list of publications, and a list of references. If you have any questions or would like to talk with me, I can be reached by phone at (617) XXX-XXXX or email at sample@mit.edu. Thank you for your consideration. I look forward to hearing from you soon.

Sincerely,

Your Name

## Request for Informational Interview

Dear Ms. XXX:

Professor XXX, a faculty member in the Electrical Engineering and Computer Science department at MIT, suggested I contact you. I have been meeting with Professor Smith as a means of exploring the field of Speech Systems Technology as a potential career option.

He thought you would be a great resource to help me gain insight into the field and focus my job search efforts. I realize your time is very valuable so I am requesting to setup a brief 20-30 minute meeting at your convenience. I would enjoy a chance to ask you some questions.

I have enclosed my resume for your review. I thought it might be useful as a way of informing you of my educational background and experience. I can be reached at mitstudent@mit.edu or (xxx) xxx-xxxx, or if you prefer I would be happy to contact your office within 10 working days to follow up with this letter. Thank you in advance for your time and effort.

Sincerely,

Your Name

## Other Career Writing

### Thank You/Follow-Up Email

Dear Mr. Smith,

It was a pleasure speaking with you and Mr. Mansfield yesterday, regarding job opportunities at Supa Systems. I am very interested in the work you are doing and am extremely impressed with the advanced applications being used in your company.

As I mentioned during our conversation, my past two summer positions were related to the development and design of software programs for industrial computer vision experiments. With my skills and interest in software design, I believe I could be of value to Supa Systems.

Thank you for your time. The interview was very informative. Please let me know if you need any more information about my background. I look forward to hearing from you.

Sincerely,

Your Name  
Your Contact Information  
(phone, address, email)

### Letter Declining a Job

Dear Mr. Smith,

I am writing to thank you for the offer to join Northeast Electronics Laboratories as member of the research and development staff. Unfortunately, I must decline your offer. I have accepted a position with another company.

It was a difficult decision for me because I was both excited and impressed by the work at Northeast Electronics. I appreciate your giving me the opportunity to meet with you and the members of the research staff.

Again, thank you for your time.

Sincerely,

Your Name  
Your Contact Information  
(phone, address, email)

# Chapter 5.

# Interviewing

## Preparing for an Interview

Preparing for your first interview can be a little nerve-racking. Good preparation will help you control the nervousness and maximize your chances of a successful outcome.

One way to accomplish this is by looking at the results from surveys of employers to discover what are the top characteristics they look for in job candidates.

Take a look at the Top 10 Personal Characteristics, start taking a personal inventory and see how you measure up in these categories. Think of one or two examples of how you have proven yourself in these areas in the past and be thoughtful about how these characteristics would be valuable in the workplace environment that you are hoping to get in to.

Do thorough company research including reading annual reports, newspaper articles and trade journals. Look at

## How Employers View Candidates

### Employers rate the importance of candidate qualities/skills

Communication skills . . . . .	4.6
Strong work ethic . . . . .	4.5
Teamwork skills (works well with others) . . . . .	4.5
Initiative . . . . .	4.4
Analytical skills . . . . .	4.3
Computer skills . . . . .	4.3
Flexibility/adaptability. . . . .	4.3
Interpersonal skills (relates well to others). . . . .	4.3
Problem-solving skills. . . . .	4.3
Technical skills . . . . .	4.2
Detail-oriented. . . . .	4.1
Organizational skills. . . . .	4.0
Self-confidence . . . . .	4.0
Leadership skills. . . . .	3.9
Tactfulness. . . . .	3.8
Friendly/outgoing personality . . . . .	3.7
Creativity . . . . .	3.6
Strategic planning skills . . . . .	3.4
Entrepreneurial skills/risk-taker . . . . .	3.2
Sense of humor . . . . .	3.0

(5-point scale, where 1=not important and 5=extremely important)

**Source:** NACE Research: *Job Outlook 2009 National Association of Colleges and Employers.*

the company homepage to find out their mission statement, long-term goals, recent press releases, and to view corporate photos. Do not limit your research only to company-controlled information. Refer to Chapter 2: Researching Employers.

## What Happens During the Interview?

The interview process can be scary if you do not know what to expect. To make it easier on you, keep in mind that most interviews fit a general pattern. The typical interview will last 30-45 minutes, although some may be longer. A typical structure is as follows:

- Five minutes: greeting and small talk
- Fifteen minutes: a mutual discussion of your background and credentials as they relate to the needs of the employer
- Five minutes: you have an opportunity to ask questions
- Five minutes: wrap-up/discuss next steps in the process

As you can see, there is not a lot of time to state your case. When you do respond to questions or ask your own, your statements should be concise and organized. But do not be too brief. This could be your last chance to market yourself to the employer!

## The Greeting, First Impressions and Small Talk

It is a good idea to arrive at least 15 minutes before your scheduled time. You can use the time to relax, organize your thoughts, and even wipe your sweaty palms with a handkerchief, if necessary. The recruiter begins to evaluate you the minute you are identified and continues to evaluate you in every way. For example, he or she is analyzing the way you shake hands upon being introduced. Be firm, it shows confidence. Do not be afraid to extend your hand first. This shows assertiveness.

Here are some tips to ensure your first impression is a positive one:

- Appearance counts. When you look good, you feel good. Make sure you look groomed and professional. Your clothes and accessories should be neat, conservative and neutral. Your clothes are your packaging and should not take attention away from the product.

- Nonverbal communication sometimes conveys a stronger message than verbal communication. According to one UCLA study, 93 percent of a person's communication effectiveness is determined by nonverbal communication. Eye contact and smiles can indicate a confident and upbeat attitude. Have a firm (but not too strong) handshake and moderate your voice to sound calm and assertive.
- During the 'settling in' stage of the interview you may engage in brief 'small talk'. This is a good opportunity to demonstrate your social and interpersonal skills as well as your excitement about the opportunity for which you are interviewing. The words you choose will say something about you, as well as your knowledge of the industry. It is important to use "their" words and talk "their" talk.

### Strategy for Discussing Your Credentials

The main part of the interview starts when the recruiter begins discussing the organization and asking some questions regarding your past experience related to the position for which you are interviewing. Many times recruiters will ask why you chose the major you did or what your career goals are. These questions are designed to determine your goal direction. Employers seek people who have direction and motivation.

It is a good idea to think about what the recruiter is trying to find out about you when they ask certain questions. For example, if you are asked to discuss a time when you had a conflict with a colleague, keep in mind that the recruiter is looking for someone who is confident about his or her own beliefs, but open to other people's ideas as well. Most of the time, he or she is looking for collaboration and compromise. Always listen carefully to the question, ask for clarification if necessary, and make sure you answer the question completely. Give a specific example and walk through the situation, step by step. A good story-telling technique is a huge plus when interviewing because it keeps the recruiter interested. So give only the essential background information and get to the point!

Your interview preparation should include identifying examples of situations from your experiences on your resume where you have demonstrated the behaviors a given company seeks. Briefly explain a particular situation that relates to the question, not a general one. Describe the situation, tell what you did specifically, and the positive result or outcome. Your answer should contain these four steps (Situation, Task, Action, Result or "STAR") for optimum success.

### STAR Method:

**Situation:** Give an example of a situation you were involved in that resulted in a positive outcome.

**Task:** Describe the tasks involved in that situation.

**Action:** Talk about the various actions involved in the situation's task.

**Results:** What results directly followed because of your actions?

Before the interview process, identify two or three of your top selling points and determine how you will convey these points (with demonstrated STAR stories) during the interview.

It is helpful to frame your answer as a story that you can tell. Typically, the interviewer will pick apart the story to try to get at the specific behavior(s). The interviewer will sometimes ask you open-ended questions to allow you to choose which examples you wish to use. When a part of your story relates to a skill or experience the interviewer wishes to explore further, he/she will then ask you very specific follow-up questions regarding your behavior. These can include "What were you thinking at that point?" or "Tell me more about your meeting with that person." or "Lead me through your decision making process."

Whenever you can, *quantify* your results. Numbers and percentages illustrate your level of contribution and responsibility. For example: "I was a shift supervisor" could be enhanced by saying ".... as Shift Supervisor, I trained and evaluated four employees."

Be prepared to provide examples of when results did not turn out as you planned. What did you do then? What did you learn? Your resume will serve as a good guide when answering these questions. Refresh your memory regarding your achievements in the past couple of years. Use examples from past internships, classes, activities, team involvements, community service and work experience.

### Example of a STAR Answer

**Situation:** During my internship last summer, I was responsible for managing various events.

**Task:** I noticed that attendance at these events had dropped by 30% over the past three years and wanted to do something to improve these numbers.

**Action:** I designed a new promotional packet to go out to the local community businesses. I also included a rating sheet to collect feedback on our events and organized internal round table discussions to raise awareness of the issue with our employees.

**Result:** We utilized some of the wonderful ideas we received from the community, made our internal systems more efficient and visible and raised attendance by 18% the first year.

## It's Your Turn to Ask Questions

When the recruiter asks, "Do you have any questions for me?" it is important to have a few ready. At this point you are able to ask strategic questions that will elicit positive responses from the employer. The questions should bring out your interest in and knowledge of the organization. Show the recruiter that you have done your homework.

---

## Some Questions to Ask an Interviewer

### The Position:

1. Would you describe the duties of the position for me, please?
2. Can you tell me about the primary people with whom I would be dealing? Is this a newly created position? If not, how long did the previous person hold it? Was the previous person promoted?
3. What support services are available to carry out the responsibilities of this position?
4. To whom would I be reporting?
5. How and when would my performance be evaluated?
6. Is regular travel a part of this position?
7. Can you tell me about the people who would be reporting to me?

### Career Paths:

1. Can you tell me about the career path this position offers?
2. What percentage of the people are promoted from this position? In how long?
3. Where does this position lead? How does it fit into the organization?
4. About the people who have preceded me in this position and in the department, where are they now, and what are they doing?
5. Is it your usual policy to promote from within?
6. How are promotions or transfers determined within the company?
7. Does advancement to upper management usually require an advanced degree?

### Education & Training:

1. What additional training might be necessary for this position?
2. Is training done in a classroom/group session or is it handled on an individual basis?
3. Are there training programs available to me so that I can learn and grow professionally?
4. What type of on-the-job training programs do you offer?
5. Does the firm support further college education for its employees?

### Assessment Questions for Interviewer:

1. What kind of personal attributes and qualifications does your company value?
2. What characteristics are important for this position?

3. What is the most significant challenge facing your staff now?
4. What have been some of the best results produced by people in this position?
5. What are your projections for this department/position for the next year? (Specify type of projections, e.g., sales, production, products, profits)
6. What do you see ahead for your company in the next five years?
7. What are your plans for expanding the (sales, audit, research, etc.) department?
8. How do you rate your competition?

### General Questions for Interviewer

1. Are there any questions about my qualifications (resume) I can answer?
2. What are the backgrounds of the leading individuals in my area of interest?
3. Are there any other assignments not specifically mentioned in the position description?
4. Can you tell me a little about your own experience with the company?
5. Is the company planning any new market lines?
6. When do you expect to make a hiring decision for this position?
7. Could you describe the hiring process?

### Wrap Up

The interview is not over until you walk out the door. The conclusion of the interview usually lasts five minutes and is very important. During this time the recruiter is assessing your overall performance.

It is important to remain enthusiastic and courteous. Once you take the cue that the interview is over, stand up, shake the recruiter's hand and thank him or her for considering you.

### Overall - Expect the Unexpected

During the interview, do not be surprised if you are asked some unusual questions. Many times questions are asked simply to see how you react. For example, surprise questions could range from, "Tell me a joke" to "What time period would you like to have lived in?" These are not the kind of questions for which you can prepare so do not spend time worrying about them in advance. Stay cool, think and give an honest answer. The employer will evaluate your reaction time and the response you give, but again, there is no way to anticipate questions like these. While these questions are not always used, they are intended to force you to react under some stress and pressure.

During the interview, be prepared to deal with aspects of your background that could be construed as negative, i.e., low grade point average, no participation in outside activities, no related work experience. It is up to you to convince the recruiter that although these points appear negative, positive

attributes can be found in them. A low GPA could stem from having to fully support yourself through college; you might have no related work experience, but plenty of experience that shows you to be a skilled and potentially valuable employee.

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## Sample Questions Asked by Employers

### Personal Assessment

- Tell me about yourself.
- What are your greatest strengths and weaknesses?
- What have you done that shows initiative and willingness to work?
- How do you react to criticism?
- How would your best friend describe you?
- Describe your ideal job.
- Define success. Define failure.
- What can you offer us?
- Who are your role models? Why?
- What motivates you to put forth your greatest effort?
- What kind of people do you enjoy working with?
- What motivates you in a job?
- What types of people rub you the wrong way?
- What frustrates you? (makes you angry?)
- Are you a joiner or a loner? A leader or follower? A committee member or an executive?
- How do you spend your spare time? What are your hobbies?
- Talk about a time when you had trouble getting along with a professor/co-worker/supervisor. How did you handle it?
- Have you ever spoken in front of a group of people? How large?
- Tell me about a leadership role you have had. What makes a good leader?
- Where do you want to be in five years? Ten years?

### Education and Experience

- Can you summarize your educational background for me?
- Why did you decide to attend school at MIT?
- Do you think you received a good education? Why or why not?
- Why did you choose the major you did?
- What courses did you like the most? The least?
- Describe for me the most rewarding accomplishment since you've started college.
- Describe your study habits. How do you balance study with personal life?
- In which campus activities did you participate?
- What job-related skills have you developed?
- How do you spend college vacations?
- What extracurricular activities are you involved in? What have you gained from those experiences?
- Have you plans for furthering your education?

- If you could start college over, what would you do differently?
- Tell me about a class in which you were part of a study group. What role did you play?
- Did you work while going to school? In what positions?
- Tell me about the most satisfying job you ever held. The least?
- Have you had any work experience related to this position?
- What kind of boss do you prefer?
- What kind of work interests you the most?
- Have you had any supervisory experience?
- What frustrates you on the job?
- Have you ever quit a job? Why?
- Give an example of a situation where you provided a solution to an employer.
- Give an example of a time when you worked under deadline pressure.
- Have you ever done any volunteer work? What kind?
- How would a former supervisor describe your work?
- Describe a time when you had to go above and beyond the call of duty to get the job done.
- Describe a time when a team member came to you for help. What was the situation? How did you respond?

### Career Ambition and Plans

- Why did you choose this career field?
- What type of position are you looking for?
- What are your long-range and short-range goals and objectives; when and why did you establish these goals; how are you preparing to achieve them?
- What specific goals, other than those related to your occupation, have you established for yourself in the next five years?
- What qualities does a successful manager possess? ... does a successful team player possess?
- What do you know about opportunities in your field?
- What are the most important rewards you expect from your career?
- What kind of challenge are you looking for?
- What do you think determines a person's progress in a good company?
- How do you determine or evaluate success?
- What are your ideas on salary?
- How much money do you hope to earn five years from now?
- What personal characteristics are necessary for success in your field?
- Do you prefer to work on your own or under a supervisor?

### Company or Organization

- Why do you want to work for this organization?
- What do you know about our organization?
- What section (service or product) are you most interested in?
- Do you prefer large or small companies? Why?
- How do you feel about working in a structured environment? A non-structured environment?

- What do you think it takes to be successful in a company such as ours?
- In what ways do you think you can make a contribution to our company?
- How long would you expect to work here?
- Are you willing to work overtime?
- Are you willing to work flextime?
- Are you willing to go where the company sends you?
- What type of work environment are you most comfortable with?
- Why do you think you might like to live in the community in which our company is located?
- Why should I hire you?

### The Close

- When could you start work?
- Is there anything else I should know about you?
- Do you have any other questions?

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## Behavioral and Case Interviewing

Behavioral Interviewing is based on the premise that the most accurate predictor of future performance is past performance in a similar situation. It focuses on experiences, behaviors, knowledge, skills and abilities that are job related. Employers predetermine which skills are necessary for the particular job and then ask very pointed questions to determine if the candidate possesses those skills. For example, if leadership is necessary for a position, you may be asked to talk about an experience in which you were a leader as well as what you think makes a good leader.

### Examples of Behavioral Questions

Behavioral questions can be difficult if you are not prepared. Always try to be conscious about what the recruiter is trying to find out about you. Setting up a mock interview with the MIT Career Development Center is an excellent way to practice. Here are some examples:

- Describe a situation in which you were able to use persuasion to successfully convince someone to see things your way.
- Describe an instance when you had to think on your feet to extricate yourself from a difficult situation.
- Give me a specific example of a time when you used good judgment and logic in solving a problem.
- By providing examples, convince me that you can adapt to a wide variety of people, situations and environments.
- Describe an experience when you were faced with problems or stresses that tested your coping skills.
- Give me an example of a time in which you had to be relatively quick in coming to a decision.
- Tell me about a time in which you had to use your written communication skills in order to get an important point across.

- Give me a specific occasion in which you conformed to a policy with which you did not agree.
- Give me an example of an important goal that you had set in the past and tell me about your success in reaching it.
- Tell me about a time when you had to go above and beyond the call of duty in order to get a job done.
- Give me an example of a time when you were able to successfully communicate with another person even when that individual may not have personally liked you (or vice versa).

### The Case Interview

Certain employers—especially management consulting firms—use a “case interview” technique to determine how well-suited you are to performing their type of work. Case interviews are used to measure your problem solving ability, your tolerance for ambiguity, and your communication skills along several dimensions.

In a typical case interview, candidates are first introduced to a business dilemma facing a particular company (often drawn from the interviewer’s professional experience). Next, depending on the length of the case, you will begin a process in which you and the interviewer engage in an open dialogue about various aspects of the case. Occasionally, the interviewer will help to guide the discussion but will often expect that you ask probing questions to uncover key information about the case facts, identify key business issues, and discuss how you move toward a possible resolution. In this way, employers hope to learn about your analytical skills, specifically, how you identify, structure, and think through problems under pressure. Consequently, your approach to a case is more important than the specific content of your answers. Employers encourage that you *think out loud* as you attempt to “crack” a case because it allows the interviewer to evaluate your thought process. Therefore, they will also evaluate your interpersonal skills and ability to communicate your recommendations and solutions to the presented business problem.

While there are many types of case interviews, most will involve at least one of the three following components:

- Brainteasers
- Estimation (Market Sizing) Questions
- A Specific Project or Business Case

#### Brainteasers

Brainteasers can be little or complex logic puzzles. These can involve using some quick math and give you a chance to demonstrate your conceptual skills to the interviewer. Your answers should be thoughtful and include some creativity in arriving at a solution.

Some sample brainteasers are:

- “Why are man-hole covers round?”
- “If a wall clock reads 3:15 pm, what is the angle between the hour and the minute hands?”

- “How would you weigh a plane without scales?”
- “Which would you rather have, a trunk full of nickels or a trunk half full of dimes?”

### Estimation Questions

Estimation Questions may be somewhat longer than brainteasers and require you to be adept in both making assumptions and working with numbers, facts, and the unknown. Usually, with these types of questions, you will likely need pencil and paper. Again, employers are looking for your ability to be creative and will be evaluating your quantitative ability very closely, so it is imperative that the numbers and formulas you create in your solutions be correct.

- “How many car batteries are sold in the US each year?”
- “How much does all the ice in a hockey rink weigh?”
- “Estimate the size of the DVD rental market in the Midwest.”

### Project Case

The third type of question found in most case interviews involves analyzing a project or a business case. These can be written or verbal cases and will take anywhere from 45 minutes or longer to process with the interviewer. Cases can be specifically created for the interview process or can be a past or current situation affecting a business or organization. As such, the best way to begin learning how to approach the different types of business cases comes with practice. Some firms will have sample cases for students to become familiar with the form, and there are many resources available to get yourself acquainted with this popular interview method. The following are just a few examples of project/business cases used in a case interview setting:

Sample case #1: “You are called in by Pizza Hut to help them develop a strategy for entering the home delivery market in which Domino’s has the dominant position. As lead consultant on this project, what would you do?”

Sample case #2: “Your client is a mid-sized hotel chain. How would you develop a pricing strategy for the client?”

Sample case #3: “A US company who has just created a new biotech device is thinking about expanding internationally. If its labor costs are competitive with industry standards, what issues might influence its decision?”

Your first challenge is to identify the type of problem the case addresses and decide whether there is an appropriate framework to structure your analysis. Popular frameworks are often derived from business concepts and several can be learned in the process of preparing for your interview. For example, each of the above scenarios addresses three different types of business situations: entering a new market, developing a pricing strategy, and developing a new product. Next, the frameworks that you use to begin your analysis will allow you to push deeper into each issue, starting with the most important first. Questions to ask yourself about a case:

- What additional information do I need to know?
- What are the key issues to be addressed?
- What are the key findings from the analysis?
- What is my hypothesis for the solution?

Overall, as your interview progresses, listen carefully and clarify anything you do not understand before proceeding. Follow the interviewer’s lead. Each individual will have a unique interviewing style and take you through the case in different ways depending on his or her priorities.

### What Employers Look for During a Case Interview

- Enthusiasm for typical consulting issues
- Ability to think out loud and brainstorm
- Listening skills and the pace of candidate’s response
- Ability to restate the problem and verify the objective of the business or project
- Conciseness and focus when possible
- Use of sketches, charts, or diagrams to describe your analysis and logic
- Ability to create reasonable hypotheses and put them to the test
- Ability to summarize final recommendations in a clear and concise way, identifying which case facts lead to your solution
- Confidence in your ideas

### Common Mistakes to Avoid During a Case Interview

- Ignoring the cues of the interviewer
- Use of business terms in the wrong context
- Asking open-ended questions throughout the entire interview (or asking a long series of questions without explaining why you need the information)
- Making assumptions that utilize extremely large numbers and percentages and not being able to use them comfortably in your analysis
- Appearing disorganized or having scattered notes on the specific business or project case
- Spending too much time analyzing the smaller aspects of the case and not referring back to the big picture or problem
- Not being able to respond well to criticism or questions about your assumptions or your solutions

### Additional Case Interview Resources

Many of the medium to large consulting firms that recruit from universities have practice cases somewhere on their website. As consulting firms increase their recruitment of students from a diverse set of majors, employers are looking to expose non-business and management majors to the dynamics of case interviews that will help prepare candidates for the interview process.

In addition to these websites, there are a variety of print, online, and campus resources to help you.

- MIT Science and Engineering Business Club: <http://web.mit.edu/sebc/>
- MIT Sloan Undergraduate Management Association: <http://web.mit.edu/suma/>

- WetFeet Career Guides (available through CareerBridge): <https://www.myinterfase.com/mit/student/>
- Vault Career Guides: <http://www.vault.com/>
- <http://www.casequestions.com/>
- <http://www.acethecase.com/>

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## Telephone Interviews

Telephone Interviews have one advantage over the other types of interviews—you can have your preparation materials in front of you as the interview is taking place. Prepare for a phone interview just as you would for a regular interview. Compile a list of your strengths and weaknesses, as well as a list of answers to typical interview questions. (see <http://jobsearch.about.com/library/weekly/aa121000a.htm> for extra hints).

### Prior to the Interview

- Keep your resume in clear view, on the top of your desk, or tape it to the wall near the phone, so it's at your fingertips when you need to answer questions.
- Have a "cheat sheet" of compelling story topics that highlight your accomplishments.
- Have company information summarized including specific critical points describing the employer and the company's products.
- Have a short list of questions about the job and the organization.
- Have a pen and paper handy for note taking.
- Clear the room—evict the roommates and the pets. Turn off the stereo and other distractions.
- Close the door. Place a sign "Interview in progress—please do not disturb. Thanks."
- If you are caught by surprise at a busy time, you may request another time to speak.

Employers use telephone interviews as a time-effective way of identifying and recruiting candidates for employment. There are three basic types of telephone calls that you get from employers at this stage. One of the keys to success is to be able to identify quickly what type you are going to be participating in.

**A. "Information Gathering Interviews"** An employer may call in order to assess your interest in the company. This often occurs if you are referred to him or her through a personal contact, referral, or someone you met at a career fair. This kind of call should be treated as seriously as an in-depth interview. It is a good way for you, as the potential employee, to see if you are a good fit with the company and its objectives.

**B. "Screening Call"** Many companies use telephone calls as a screening mechanism in order to narrow the pool of applicants who will be invited for in-person interviews. These are quick and the person

calling you will most likely be someone from Human Resources.

**C. "In-Depth Telephone Interview"** In this case, the telephone is being used as a way to minimize the expenses involved in traveling for the interviewer and/or the interviewee. Depending on the type of organization that you are interviewing with, you may be interviewed by a hiring committee, where you will be broadcast over a speakerphone.

### During the Phone Interview

- Do not smoke, chew gum, eat, or drink.
- Do keep a glass of water handy, in case you need to wet your mouth.
- Smile. This may sound strange but smiling will project a positive image to the listener and will change the tone of your voice.
- Speak slowly and enunciate clearly.
- Use the person's title (Mr. or Ms.) and their last name. Only use a first name if they ask you to.
- Do not interrupt the interviewer.
- Take your time—it's perfectly acceptable to take a moment or two to collect your thoughts.
- Give succinct answers.
- Be able to tell a brief example/story of your experiences.

### Before you hang up

- Thank the interviewer for the opportunity.
- Get the correct spelling of your interviewer's name.
- Get contact information for follow-up questions.
- Ask about the hiring timeline, "When are you looking to have a decision made?"

### After the Interview:

- Take notes about what you were asked and how you answered.
- Follow with a thank-you note, (see <http://jobsearch.about.com/library/weekly/aa082398.htm> for further hints) which reiterates your interest in the job.

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## Dress Code for Interviews

"What **am** I going to wear?" We get asked this question nearly every day during the recruiting season. Basically, it's common sense. You can start by asking yourself "*What kind of company will I be interviewing with?*" If it is a *Fortune 500* company, obviously you should wear a traditional suit. But maybe you will be seeing a funky, upbeat software company and you heard the recruiter showed up for interviews last year in a tie-dye shirt, sandals and beads. Use your own discretion but we suggest you dress the way you would if you were giving an important presentation at the company or attending a business meeting.

## Men

**Suits**—A traditional suit is preferred to a blazer. The color should either be a dark blue or gray in either a solid or invisible plaid with a pressed long-sleeved (even in summer!) white dress shirt. If you buy or borrow one, a conservative sports coat and dress slacks are best.

**Shirts**—White shirts are always your first choice. Solid blue is an acceptable alternative. If you don't own either, you should really go buy one. Get plain or button down collar. Choose cotton material. Polyesters and nylon are out.

**Grooming**—Avoid heavy cologne or aftershave.

**Socks**—Dark, neat and preferably over the calf. White athletic socks are a big "no no" unless you are interviewing to be a summer camp counselor at a sports camp.

**Shoes**—Clean and polished leather lace-up black or dark brown shoes are best. Avoid shoes with a run down heel.

**Neckties**—Conservative silk ties are best. Be sure the tie coordinates with the suit, is solid or has small neat patterns. Be sure the knot is neat and centered on your neck. The bottom of the tie should just reach your belt.

**Belts**—Wear a black or brown belt, one inch wide, no large buckles.

**Hair**—Clean, well-groomed and professional looking. Remember, the choice to cut your hair is yours, but the choice to hire you is the interviewer's. Be sure beards and mustaches are neat and trimmed.

**Accessories**—No flashy cuff links, rings or gold chains. Wedding or college ring is fine. No earrings. Not even one small one. No visible body piercing.

## Women

**Suits**—Skirted suits are almost always preferable. A solid navy, grey or black suit with a solid or light colored blouse is recommended for most positions. Avoid brown, green or pastel suits. Business dresses are acceptable in fields that are less formal and less conservative. Avoid frilly collars and cuffs.

**Shirts**—A light colored blouse is ideal.

**Makeup**—Natural looking and conservative. Avoid bright colors. Use a neutral or clear nail polish on clean and manicured nails. Avoid heavy perfumes.

**Hosiery**—Light, natural color, plain style (no patterns).

**Shoes**—Should be conservative and compliment the color and style of the interview suit. Low to medium heels are ideal. Basic pumps, toes should be closed, no strappy shoes, and avoid multi-colored trim.

**Hair**—Should be freshly cleaned and neatly styled. Long hair should be worn as conservatively as possible.

**Accessories**—One conservative, non-dangling earring per ear, one or 2 rings per hand. No dangling or distracting bracelets. Avoid purses of any size—carry a portfolio or briefcase instead. No visible body piercing beyond earrings.

## Dining Etiquette for Interviews

If you are lucky, one round of the interview process will take place over some sort of a meal setting. This could be the most daunting meal of your career. Mental preparation is key! As a rule of thumb, when you face a full battalion of knives, forks, and spoons, start with the flatware the furthest from the plate first. If you are unsure which fork to use for your salad course, choose the one with the slightly smaller prongs.

As soon as you are seated, put your napkin on your lap. Sometimes, at very formal restaurants, the waiter may do this for you. When you use your napkin, gently dab at your lips. It is meant to catch food from falling into your lap and it should gently dust the crumbs from your lips. When you are finished, place your knife and fork so they lie horizontally across your plate, and place your napkin next to your plate. Do not refold it. Do not leave it on the chair when you get up to exit the restaurant.

## Dining Tips

- If you are not sure what to order, follow your host's lead.
- If the recruiter is not first in line to order, ask him/her, "What do you recommend?"
- A chicken breast or vegetable plate is always safe.
- Stick to soft drinks, tea, coffee, and water. Avoid beer, wine, and mixed drinks.
- Cut one bite (meat, fruit, or vegetables) at a time. Keep your fork prongs pointed down, not up.
- With dinner rolls, break off and butter one small piece of bread at a time; avoid making a sandwich.
- Never make slurping or yummy sounds.
- When sharing a sauce with others, spoon some of it on to your plate; don't dip your food into it.
- If you need to leave the table temporarily, place your napkin on your seat.
- Keep your elbows off the table.
- Drink from the glass to your right.
- Eat at the same pace as your host or hostess.
- If you are a non-smoker and your host asks for a table in the smoking section, grin and bear it.
- Be prepared to be conversational.
- Skim the menu quickly; order a medium priced entrée that will be the least messy to eat.
- Relax and keep the conversation focused on business-related or casual topics.
- Say please and thank you to the waiter.
- Don't talk about personal relationships, recent parties, politics, sports, or religion.

- Don't eat the garnish.
- Don't discuss dietary restrictions; downplay your food preferences.
- Don't drink alcohol if you are under age 21; don't have more than one drink if you are 21 or over and the recruiter insists.
- Don't argue over the check or offer to pay the tip; the host who invited you must take care of both.
- Don't eat as if this is your last meal. On the other hand, don't dine on half a lettuce leaf. You'll make the best impression by eating like a human—not like a wolf or a bird.

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## The Site Visit/Interview— One Step Closer

After an on-campus interview, lead candidates are usually invited to visit the employer's facility. While on-campus screening interviews are important, on-site visits are where jobs are either won or lost. Work with the employer to schedule the on-site visit at a mutually convenient time. Sometimes employers will try to arrange a site visit for several candidates to take place at the same time, so there may not be much flexibility.

Notification of a plant trip may be by telephone or mail. Respond promptly if you are sincerely interested in this employer. Decline politely if you are not. Never go on a plant trip for the sake of the trip. If you are attending, document the name and phone number of the person coordinating your trip. Verify who will be handling trip expenses. Most medium and large-size companies (as well as many smaller ones) will pay your expenses, but some will not. This is very important because expenses are handled in various ways:

- the employer may handle all expenses and travel arrangements;
- you handle your expenses and arrangements (the employer may assist with this), and the employer will reimburse you later;
- the employer may offer an on-site interview, but will not pay for your travel expenses.

Bring extra copies of your resume, copies of any paperwork you may have forwarded to the employer; names, addresses, phone numbers and email addresses of your references; an updated college transcript; a copy of your best paper as a writing sample; a notebook; a black and/or blue pen for filling out forms and applications; and names and addresses of past employers.

Once again, your role at the interview is to respond to questions, to ask your own questions and to observe. Be ready to meet people who are not part of your formal agenda. Be courteous to everyone regardless of his or her position; you never know who might be watching you and

your actions once you arrive in town. Treat the custodian the same as you would the CEO. Word gets back to people in the most interesting ways.

Soon after the site visit, record your impressions of your performance. Review the business cards of those you met or write the information in your notebook before leaving the facility. You should have the name, title, address, phone number, and email of everyone who was involved in your interview so you can determine which individuals you may want to contact with additional questions or follow-up information. Also, a thank-you letter should be written to the person(s) who interviewed you and will be making the hiring decision. Stay in touch with the employer if you want to pursue a career with the organization.

The site visit is a two-way street. Just as the employer is evaluating you, you are there to evaluate the employer and to determine if your expectations are met for job content, company culture and values, organizational structure, and lifestyles (both at work and leisure). Take note of how the employees interact with each other and their supervisors and also assess the physical work environment.

Just as any good salesperson would never leave a customer without attempting to close the sale, you should never leave an interview without some sort of closure. If you decide that the job is right for you, do not be afraid to tell the employer that you feel that there is a good fit and you are eager to join the team.

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## Negotiating Salary and Benefits

Before you start negotiating your salary, be sure that you have done enough research to know what you can realistically expect. Be aware, that you will be offered a competitive salary based on what you are worth—not on what you want or what others are getting for similar jobs. Each person is unique, and "the going rate" is little more than a guideline. Salaries can vary depending on where the job is located.

The MIT Career Development Center compiles a yearly salary survey that has been filled out by departing graduates who have been offered jobs.

Employee benefits at most large companies are generally worth another thirty percent or more on top of your salary. The normal benefits include paid vacation (usually two weeks for the first year), health insurance, tuition assistance for courses taken after work, contributions toward your pension, and an opportunity to buy stock in the company with the company making a contribution toward the purchase. If the company grows, and its stock rises accordingly, this last benefit can become a nice nest egg. In addition, some companies may also

include life insurance and/or relocation expenses in their benefit packages.

It is also possible to work for a company and receive no benefits whatever. This is typically the case if you sign on as a consultant, or as a contract worker. Your salary should be larger in this case because it is up to you to pay for health insurance and to provide for your retirement.

Small companies may not have the cash flow to offer large benefits. They may make up for this by giving stock options (the chance to buy the stock later at an earlier and lower price), or a new startup company may pay partly in stock or give an outright gift of stock. Obviously, the value depends on the success of the company.

For an index to many online salary surveys, see the JobSmart website at <http://jobsmart.org/tools/salary/> also visit [www.jobweb.com/sitemap.aspx](http://www.jobweb.com/sitemap.aspx)

Research salaries for the industry and position you seek by visiting:

- <http://web.mit.edu/career/www/infostats/graduation.html>
- <http://www.salary.com>
- <http://www.rileyguide.com/salguides.html>
- <http://jobstar.org/tools/salary/index.php>
- <http://www.bls.gov/oes/home.htm>
- <http://www.salaryexpert.com/>

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## The Art of Negotiating

Once you have been offered a job, you have the opportunity to discuss with the employer the terms of your employment. Negotiating with your potential employer can make your job one that best meets your own needs as well as those of your employer. To ensure successful negotiations, it is important to understand the basic components. The definition of negotiation as it relates to employment is: a series of communications either oral or in writing that reach a satisfying conclusion for all concerned parties, most often between the new employee and the hiring organization.

For more information see <http://web.mit.edu/career/www/workshops>

Negotiation is a planned series of events that requires strategy, presentation and patience. Preparation is probably the single most important part of successful negotiations. Any good trial attorney will tell you the key to presenting a good case in the courtroom is the hours of preparation that happen beforehand. The same is true for negotiating. A good case will literally present itself. What follows are some suggestions that might help in your preparation.

## Research

Gather as much factual information as you can to back up the case you want to make. For example, if most new employees cannot negotiate salary you may be jeopardizing the offer by focusing on that aspect of the package. Find out about the costs and benefits associated with the health plan, dental plan, retirement package, leave entitlements, and other benefits.

## Psychological Preparation

Chances are that you will not know the person with whom you will be negotiating very well. If you are lucky enough to be acquainted, spend some time reviewing what you know about this person's communication style and decision-making behavior.

In most cases this person will be a stranger. Be assured that he or she will expect some level of negotiation, even if it only relates to your start date. How will you "psyche" yourself up to feel confident enough to ask for what you want? How will you respond to counteroffers? What are your alternatives? What's your bottom line? In short, plan your strategy.

Create a list of all the items you want to negotiate. Be sure you know exactly what you want, not approximately. This does not mean you will get everything you want, but having information clearly outlined in your head will help you determine where you can compromise in return for things that are more important to you. Unless you know what you want, you won't be able to tell somebody else. Clarity improves communication, which is the conduit for effective negotiations.

## Dollars and Sense

Always begin by expressing genuine interest in the position and the organization, emphasizing the areas of agreement but allowing "wiggle room" to compromise on other areas. Be prepared to support your points of disagreement, outlining the parts you would like to alter, your suggestions on how this can be done and why it would serve the company's best interests to accommodate your request.

Back up your reasons for wanting to change the offer with meaningful work-related skills and positive benefits to the employer. Requesting a salary increase because you are a fast learner, or have a high GPA usually are not justifiable reasons in the eyes of the employer. Meaningful work experience or internships that have demonstrated or tested your professional skills are things that will make an employer stop and take notice.

State all the items to negotiate at the beginning. Cite those areas in which you know you already agree upon. Follow with areas that are open to negotiation.

It is sometimes more comfortable for job seekers to make this initial request in writing and plan to meet later to hash out the differences. Keep in mind that the employer has chosen you from a pool of qualified applicants, so they need you as much as you need them.

Do not rush the process. Remember this is a series of volleys and lobs, trade-offs and compromises that occur over a period of time. It is a process—not a singular event!

Once you have reached a conclusion with which you are both relatively comfortable, present in writing your interpretation of the agreement so that if there is any question, it will be addressed immediately. Negotiation, by definition, implies that each side will give. Do not perceive it as an ultimatum.

If the employer chooses not to grant any of your requests—and realistically, that can happen—you will still have the option of accepting the original offer provided that you have maintained a positive, collaborative and friendly atmosphere during your exchanges. You can always re-enter negotiations after you have demonstrated your worth to the organization.

## Money Isn't Everything

There are many things you can negotiate besides salary. Benefits can add thousands of dollars to the compensation package. For more information about benefits see <http://benefitslink.com/index.shtml>. Some negotiation points can include:

- Vacation time
- Paid personal leave and sick days
- Medical / dental / health coverage
- Child care or elder care
- Discounts on the company's products and services
- Gym membership
- Stock options / annual bonuses
- Retirement / disability and life insurance
- Flexibility of hours
- Relocation package
- Professional memberships / affiliations
- Tuition reimbursement for continued education

For tips on Negotiating Offers, see <http://web.mit.edu/career/www/guide>.

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# Chapter 6.

## Academic Pathways

Throughout your MIT career, you will make many choices related to academic pursuits. The Career Development Center can assist you, starting your first year with issues related to choice of major, course selection and obtaining research experiences. More and more of our students are going global while at MIT and our Global Education Office can help you pursue study abroad and work abroad experiences. Later you may consider graduate or professional school. The materials and advice in this chapter can help you with some of these decisions.

### Choice of Major—Consider Your Options

To help you weigh options for your choice of major at MIT, ask yourself these questions about each academic department/field you are considering:

#### Appeal of area of study

- Will you enjoy this major for its own intrinsic value?

#### Level of challenge

- Do you think you can perform well in this field?
- Is your motivation strong enough to enable you to succeed in this major?
- Are you choosing this major because it is easy? Because it is hard?

#### Department characteristics

- How big is the department?
- How do you relate to other students in this major?
- Are the faculty accessible? Do you seek them out for informal discussions and other interactions?
- Are there activities in the department that bring students together? Are there activities that bring students and faculty together?

#### Courses within your major

- Will this major help you acquire prerequisites needed for graduate studies you may be considering?

- How many credits does this major require to complete a degree? Do you wish to focus largely on one department, or do you want flexibility to study in other departments as well?

#### Global experience

- How much does the department facilitate or encourage or accommodate study abroad, research abroad, work abroad?

#### UROPs/internship programs

- Are there opportunities for you to get experience in your major that will help prepare you for your potential career?

#### Skills

- What kinds of skills will you be developing in this major?

#### Family, peers, outside influences

- How are outside pressures from family, peers and the job market influencing your decision?

#### Here are some additional resources for you to consult regarding choice of major:

- The Major Guides on our website—these documents highlight skills learned, career path options commonly associated with different fields of study, and resources to help you learn more about majors and careers: <http://web.mit.edu/career/www/infostats/byschool.html>.
- Sloan Career Cornerstone Center—excellent write-ups on career paths in engineering and science, <http://www.careercornerstone.org>.
- UAAP Choice of Major website: go to this site: <http://mit.edu/firstyear>, then add to the url: [/2012/choiceofmajor/index.html](http://2012/choiceofmajor/index.html)—you may need to change the year to your class year (e.g., [/2013/choiceofmajor/index.html](http://2013/choiceofmajor/index.html) )

## Global Education Office

The Global Education Office is the one-stop office where students can visit for information and advice on how to go global! We offer one-on-one advising sessions to help you identify and explore the various options that best fit your academic plans and your professional goals. In addition to this we can help you with passports, visa information, health and safety planning and cost-saving ideas for living overseas. We offer a series of presentations and workshops, pre-departure and re-entry meetings and are here as a resource to help you prepare for a meaningful and successful time abroad.

In addition to general support related to global educational opportunities, the MIT Global Education Office supports all counseling of students who are seeking to study abroad and who are interested in applying for a distinguished fellowship. We are here to assist you in identifying the program(s) that best fit your needs, prepare you for the transfer credit process, and also work with you on logistical details such as housing and insurance coverage abroad. Please find more information about specific study abroad opportunities below.

- MISTI (internships)—<http://web.mit.edu/misti>
- Public Service Center (fellowships, grants, d-Lab, etc.)—<http://web.mit.edu/mitpsc>
- UROP (IROP - international research)— <http://web.mit.edu/urop/basicinfo/irop.html>
- Alumni Association (externships)— <http://alum.mit.edu/students/NetworkwithAlumni/ExternshipProgram>

### Study Abroad Programs

MIT students who plan to study abroad have many exciting options from which to choose. The following table includes the various categories of opportunities with examples.

Program Type	Year-Long	Semester	IAP	Summer
MIT-Managed Institute Wide	CME	MIT-Madrid (spring only)	IAP-Madrid IAP-Germany	
Departmental	Aero/Astro	Aero/Astro Architecture Materials Science		
Direct Enrollment Through MISTI	Examples include: Ecole Polytechnique, France	Examples include: Ecole Polytechnique, France		
Other Direct Enrollment	Examples include: Technion, Israel U. of Edinburgh LSE (General Course)	Examples include: Technion, Israel Barcelona, Spain Mexico U. of Edinburgh		LSE
Outside Providers	Examples include: Oxford, UK Australia New Zealand	Examples include: Cambridge, UK South Africa Turks & Caicos Islands	Examples include: Mexico Ireland Argentina	Examples include: France Germany Ireland Spain, UK

In addition to the listings above, a wider collection of global opportunities can be found on the MIT "Go Global" website at <http://web.mit.edu/goglobal>.

## Global Education Opportunities

### Benefits of Going Global

The world today is a very different place than it was even a few years ago. Business and research are conducted across national boundaries, different time zones, and cultural contexts. This means that as an MIT graduate you will be called upon to work effectively with global collaborators and across transnational engineering and science environments. In this increasingly global context, deciding to participate in a study abroad program could be one of the best decisions you make as an undergraduate.

Students at MIT are able to engage with the world in a variety of ways. Students can enroll in a study abroad program taking classes in English or a foreign language, undertake a research project, participate in an internship or assist underserved communities through public service. Our partner offices include:

## Study Abroad Opportunities

### Planning Study Abroad

You have probably already heard from other MIT students about the life altering experience of their study abroad program. It is never too early to start thinking about your own study abroad experience and to start planning for it.

Be strategic in thinking about the study abroad possibilities that might benefit you most. Contemplate these programs from the point of view of your major, as well as your professional and research interests and goals. The more integrated your experience abroad will be with your goals and interests, the more you will benefit from that opportunity.

If you already have developed an interest in a particular culture or region of the world by your freshman year, you may wish to start learning (or continue learning if

you started in high school) the foreign language most commonly used in that culture or region. You also might want to explore the international locations of exciting developments in the academic/research fields that interest you.

If you start to think about study abroad in your sophomore or junior year, you should still be able to find a study abroad program to fit your interests and goals. Even in your senior year you may find some opportunities, especially internships and post-graduate foreign fellowships.

### **Deadlines**

Please keep in mind that each study abroad program has its own application deadlines. In addition, the Global Education Office has its own internal deadlines (May 1 for summer, full-year or fall semester study and December 1 for spring semester study) to ensure that students are prepared and that all the relevant MIT offices can be informed of the students approved for study abroad.

### **How to Begin Study Abroad**

We invite you to visit the Study Abroad website (<http://web.mit.edu/studyabroad>) and we look forward to meeting with you to discuss your study abroad ideas and to help you find a program that will work best for you. Please make an appointment to meet with us by contacting the Global Education Office, 12-189, [studyabroad@mit.edu](mailto:studyabroad@mit.edu) or at (617) 253-0676.

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## **Distinguished Fellowships**

The Distinguished Fellowships Program, in 12-189, is available to provide support and guidance for students preparing applications for the most prestigious awards for foreign study. In many cases, these awards pay for the full costs of graduate programs or international research. They are wonderful opportunities to further one's horizons without burdening oneself. These awards, including but not limited to the Rhodes, Marshall, Mitchell, Gates-Cambridge, and Fulbright, have fostered the careers of the world's best students. Winners have gone on to become a United States President, a leading string theorist (Brian Greene), CEOs, and even MIT professors. Please keep in mind that these types of awards require a great deal of work and are on extremely strict deadlines, so please visit our website for the application schedule and deadlines. If you are interested in learning more, please visit our website <http://web.mit.edu/scholarships> and contact Kimberly Benard ([benard@mit.edu](mailto:benard@mit.edu) or 617.253.4378) for an appointment.

Key Qualities Valued in Distinguished Fellowship Competitions:

- Strong Academic Record
- History of Volunteering/Public Service
- Desire for Further Research or Studies

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## **Graduate School Advising**

You may be considering earning an advanced degree for several reasons, including the opportunity to gain knowledge in a particular field of interest, an interest in expanding career opportunities and increasing earning potential, or postponing a job search until economic conditions improve.

A 2008 survey conducted by the MIT Global Education and Career Development Center found that 42% of graduating seniors planned to pursue advanced degrees right after graduation. According to the Council of Graduate Schools, graduate school enrollments are on the rise, and this trend is likely to continue.

Strong undergraduate academic preparation is essential to succeed in graduate school. Key skills for success as a graduate student include: (1) critical thinking, (2) analytical abilities, (3) research abilities, (4) written communication, (5) verbal communication, (6) time management, (7) self-motivation, and (8) self-discipline.

### **Range of Degrees**

Graduate degrees include

- M.S.= Master of Science
- M.A.= Master of Arts
- M.B.A= Master of Business Administration
- Ph.D.= Doctor of Philosophy
- Sc.D.=Doctor of Science
- M.D.= Doctor of Medicine
- D.D.S.= Doctor of Dental Surgery
- D.V.M.= Doctor of Veterinary Medicine
- J.D.= Juris Doctor
- LL.M.= Master of Laws
- J.S.D.= Doctor of the Science of Law

### **Top Ten Criteria to select a Graduate Program**

- Matching your career interests/goals with the program
- Quality of the program Department and faculty strength and reputation in the profession
- Faculty/student ratio
- Program costs
- Internship or field-work opportunities
- Quality of research facilities, laboratories, and libraries
- Financial Aid resources
- What recent alumni are doing in the field now
- Can you easily make connections with alumni for purposes of discussing how graduate school may enhance your opportunities

The best experts on assistantships and fellowships, whether you are interested in MIT or other graduate schools, are the staff in the Office of the Dean for Graduate Education (3-138). See their website for up-to-date information on the subject, <http://web.mit.edu/odge/financialaid>. They also have various compendia listing individual

fellowship programs. For information on the aid available in a particular discipline, a good place to turn is the graduate office in the corresponding MIT department.

Most graduate schools will require you to take the Graduate Record Examinations (GRE) before you apply. See <http://www.gre.org> for more information and to apply to take the GRE. For more in depth information, see our online workshop “Applying to Graduate School” at: <http://web.mit.edu/career/www/workshops/gradschool>.

## Preprofessional Advising

The Preprofessional Advising staff works with students interested in applying to:

- Medical, dental, and other health related professional schools
- Law school

The following services are available to both current MIT students and alumni/ae:

- **Walk-in Hours:** 15-minute sessions, set up to answer quick questions. Appointments: 30-45 minute sessions, via phone or in-person. Call our front desk (617-253-4733), or come into our office (12-170) to schedule an appointment.
- **Mock Interviews:** 45-minute sessions to help current applicants prepare for medical/health profession school interviews.
- **Credential Service:** Service for Prehealth students that stores recommendation letters at the MIT Career Development Center (12-170) and sends letters to schools through DHL or electronic submission.

More information on our services and upcoming events can be found at <http://web.mit.edu/career/www/preprof>.

### Staff:

*Erin Scott*, Counselor for Preprofessional Advising:  
[scotte@mit.edu](mailto:scotte@mit.edu)

*Shonool Malik*, Associate Director for Preprofessional Advising: [shonool@mit.edu](mailto:shonool@mit.edu)

*Tamara Menghi*, Assistant Director for Preprofessional Advising: [trmenghi@mit.edu](mailto:trmenghi@mit.edu)

*Shanell Littlejohn*, Administrative Assistant: [slittlej@mit.edu](mailto:slittlej@mit.edu)

## Considering & Exploring a Professional School/Career:

Individuals interested in health related careers, law or business careers should consider the following:

- What is my motivation for entering this career?
- How can I explore this career during my time at MIT?
- What are my core interests and skills and how do they align with this career?

To help answer these questions, we strongly recommend that you set up an appointment with a member of our staff to discuss your interest in these careers. In addition, we

encourage the use of the resources on the Preprofessional Advising website <http://careers.mit.edu/preprof/> and the Alumni ICAN database (<https://alum.mit.edu/cs/ican/index.html>).

## Personal Statement/ Essay

Regardless of the type of school you are applying to, you will be required to submit a personal statement as part of the application process. Graduate school application essays typically ask applicants to discuss their previous experience, future professional goals, and how they believe that the graduate program can assist them in achieving those objectives. Graduate programs seek individuals with clear commitment to the field, who have corresponding ideas and aspirations. The personal statement provides the applicant with the opportunity to articulate these goals and display strong writing skills. Your essay should be well thought out, concise, compelling, and interesting to the reader. Remember, admissions officers read hundreds of personal essays. It will be important for you to keep in mind the following suggestions:

1. Start your essay with something that will grab the reader’s attention. Personal anecdotes can often help draw the reader into the essay.
2. Make the essay personal. Do not simply repeat the information that can be read on your application. Provide the reader with an inside view on your thoughts, interests and drives.
3. Make your motivation and commitment clear to the reader. The admissions officer wants to get a sense from the essay that you are extremely interested and motivated to obtain the graduate degree and will apply the education to your professional work.
4. Create a well-written document. Your essay is a sample of your writing abilities. It is important that you convey your thoughts clearly, with carefully chosen vocabulary and correct grammar.

Attend the Essay Writing workshop offered by MIT Career Development Center. <http://careers.mit.edu>. For specific tips on writing a personal statement for professional school, please see our online essay writing workshop.

## GPA

GPA standards vary among different programs. While these numerical records are an important factor, they are not the only thing considered. Students with a range of GPA’s and test scores are accepted. Most of the time, the average GPA of students currently enrolled in the program or the minimum GPA accepted can be found on the admissions webpage. Admissions committees consider all aspects of an application when making selection decisions. Look at our website, to see the MIT applicant range of GPAs and

test scores that have been accepted to medical and law schools. <http://careers.mit.edu/infostats/>

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## Prehealth Information

The following information pertains most directly to students applying to medical and dental schools. Many of the criteria are similar for other health related professional schools. For more specific information on other health related professional schools, please visit our website. <http://careers.mit.edu/preprof/>

### Course Requirements:

There is no required major for applying to health related professional schools. There are however, a number of recommended courses one must take prior to applying. Review the course list online with your academic advisor and meet with a Preprofessional Advising Staff member if you have any questions.

### Volunteer / Service Activities:

Admissions officers are interested in applicants who, in addition to having good academic credentials, are humanistic in nature, who care genuinely about others and have shown evidence of this interest through volunteer or community service activities. Your participation in volunteer work and leadership activities can help develop personal qualities such as integrity, breadth of interest, human relations skills, and motivation towards a career in the health professions.

### Prehealth Advisors

MIT draws its advisors from many groups: MIT faculty, physicians at MIT Medical, MIT Dental, and the MIT-Harvard Health Sciences and Technology (HST) Program, and research affiliates from HST, Massachusetts General Hospital, and Brigham and Women's Hospital. Advisors volunteer their time to discuss medical careers with advisees and write a letter of recommendation for them. Their expectation in return: responsible, timely, and continuing communication throughout the year.

### Getting an Advisor

Individuals who want a prehealth advisor are encouraged to open a credential file and apply for an advisor two years prior to the year they are interested in matriculating at a health related professional school. For example, a person looking to matriculate in fall 2011 must request an advisor in fall 2009. Early registration enables the Preprofessional Advising staff to determine the number of advisors needed, and provides an advisee with adequate time and opportunity to develop a meaningful relationship with his or her advisor.

Preference in the advisor assignment process is given to current undergraduate and graduate students. Local area

alumni may be assigned an advisor in late fall semester, provided that there are advisors available once all current students have been assigned. Please be advised that we **cannot guarantee** an advisor to all those with requests past the November 30th deadline. Visit the following site for detailed steps on requesting a Prehealth Advisor and call 617-253-4733 to set up an appointment with a Preprofessional Advising staff member: <http://web.mit.edu/career/www/preprof/advisors.html>.

### Application Process

Please note: The information provided below pertains primarily to medical school and dental school. For more details on how to apply to other health related professional schools, please see our website.

The American Medical College Application Service (AMCAS) is a nonprofit, centralized application processing service for applicants to the first-year entering classes at participating U.S. medical schools. <http://www.aamc.org/>

The AMCAS application will include:

- Academic information from all of the colleges you attended
- Copies of all undergraduate and graduate, transcripts
- MCAT scores
- Personal essay/statement

It is important to note that many admission decisions to medical schools are made as applications are received and reviewed. It is critical that you submit your AMCAS application as early as possible, preferably by June 30th. Once your AMCAS application is received it may take approximately a month to receive a secondary application from individual schools.

The Associated American Dental Schools Application Service (AADSAS) is a service available to students applying to dental schools participating in the application service. AADSAS simplifies the application process by providing one standardized form, relieving students of the need to complete multiple applications. AADSAS serves only as an information clearinghouse and does not influence the dental schools appraisal or selection of applicants. Each dental school has the right to request supplemental information from the applicants. <http://www.adea.org>

### Entrance Tests: MCAT and DAT

The Medical College Application Test is a standardized examination comprised of multiple-choice questions and a writing assessment. The test is divided into four sections. Scores for the Verbal Reasoning, Physical Sciences, and Biological Sciences are reported numerically, while the Writing Sample is scored alphabetically. The MCAT is scored on a scale of 1-45.

The paper MCAT exam was replaced in 2007 with a computer based test (CBT). The CBT MCAT is offered several times a year, allowing more scheduling flexibility and quicker score reporting.

The Dental Admission Test (DAT) is conducted by the American Dental Association (ADA) and has been in operation on a national basis since 1950. The Dental Admission Test is administered by computer on almost any day of the year. The testing program is designed to measure general academic ability, comprehension of scientific information, and perceptual ability. For more information on the DAT & the ADA visit the following sites: <http://www.ada.org/prof/ed/testing/dat/index.asp> and <http://www.ada.org/>.

## Recommendation Letters

All applicants need at least three letters of recommendation. We recommend obtaining three to five letters, of which two should be from a science professor and one from a humanities professor. Your prehealth advisor's letter will count as one of your letters and will also act as a cover letter for your other recommendation letters.

It is important to choose your writers with care and good judgment. Please be certain that the people you ask to write letters for you will be writing the letter you expect. Meet with them and discuss your reasons for wanting to pursue a health career.

As a courtesy, give each recommender at least two months to write your letter of recommendation. It is suggested that your letters be from the following areas: science classes, humanities classes, research experiences, and community service or leadership experiences. Letters from faculty members from a variety of academic disciplines are very important.

## Credential Service

The Credential Service is designed to provide a reliable, efficient means of disseminating letters of recommendation for MIT students and alumni/ae for the use of entering medical or other health related professional programs. Letters are mailed or electronically transmitted to the schools designated by the applicant, once his or her file is complete.

Students and alums may open a file as early as they would like to store recommendation letters for future applications to medical or other health profession programs. It is ideal that the credential file be opened two years prior to the year they are interested in matriculating at a health profession school.

## Secondary Applications (for medical school)

Secondary applications are received approximately a month or more after submitting your AMCAS application.

These applications will request similar, if not the same information, provided in the AMCAS application and will also request additional specific personal statements or essays. It is important that you do not submit the same essay you submitted with the AMCAS application. Your recommendation letters are sent to schools during the secondary application phase.

## Interviews

Interviews are required for medical and dental schools and are the final phase of the application process. Interviews may be held by one member of an admissions committee or by a group of individuals. Applicants should be prepared to discuss all aspects of their application, including their specific interest in the institution with which they are interviewing. It is recommended that applicants participate in a mock interview and review the interview workshop, as well as, the sample interview questions sheet in preparation for a formal school interview: <http://careers.mit.edu/preprof/>.

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## Prelaw Information

The *Official Guide to ABA-Approved Law Schools*, published by the Law School Admission Council (LSAC), lists the following as the criteria used most by law schools in evaluating prospective students.

- Personal statement
- Course of study
- Quality of undergraduate courses
- Letters of recommendation
- LSAT score
- Grade Point Average (GPA)
- College activities
- Ethnic background
- Post college activities
- Uniqueness/Personality
- Motivation to study Law

## Activities and Work Experience

Experiences both in and out of the classroom are important in evaluating applicants. Law schools are looking for individuals that bring a unique perspective, background, and insight to strengthen the classroom dynamic and intellectual exchange in law school. Student leadership activities, work experiences, and personal life challenges are all elements that are considered when evaluating and making decisions on which applicants to accept.

## Academic and LSAT Credentials

Your GPA and Law School Admission Test (LSAT) score are important factors to being competitive with other law

school applicants; however they certainly aren't the only factors considered. Admissions committees consider all aspects of an application, i.e., work experience, leadership, etc., when making selection decisions. Visit the MIT Law School applicant data for more detailed information on the average GPA and LSAT scores: <http://careers.mit.edu/infostats/>

## Prelaw Advisors

Advisors are professionals within the MIT community active in the practice of law, legal scholarship, teaching, and/or counseling. These individuals volunteer their time to speak with students about current trends in the legal profession, as well as experiences they have had both in law school and as a professional. Students and alumni are welcome to contact one or all of the advisors to explore their legal interests. Advisors' names and contact information can be found at: <http://careers.mit.edu/preprof/lawadvisors.html>

Prior to contacting an advisor, it is recommended that a student do the following:

- Review the information provided throughout the Prelaw website.
- Utilize the resources (books, school pamphlets, LSAT information, etc.) available in the Preprofessional Advising Office, 12-185.
- Make an appointment by calling 617-253-4733 to meet with a member of the Preprofessional Advising staff to discuss basic law school information and the application process.

## Application Process

Applicants must obtain applications directly from law schools online or by mail. It is important to note that many admission decisions are made on a rolling basis as applications are received and reviewed. It is critical that you submit your application as early as possible, preferably by the end of December.

## LSAC

<http://www.lsac.org>

The Law School Admission Council (LSAC) is a nonprofit corporation whose members are 200 law schools in the United States and Canada. Programs and Services offered by the LSAC:

- The Law School Admission Test (LSAT)
- The Law School Data Assembly Service (LSDAS)
- Candidate Referral Service (CRS)
- Law School Forums
- MILE Program (Minorities Interested in Legal Education)
- Publications, Software, and Videos for Legal Education
- Questions

## LSDAS

<http://www.lsac.org/>

The Law School Data Assembly Service (LSDAS) provides a means of centralizing and standardizing undergraduate academic records to simplify the law school admission process.

The LSDAS prepares and provides a report for each law school to which you apply. Your report will include:

- An undergraduate academic summary.
- Copies of all undergraduate, graduate, and law school transcripts.
- LSAT scores: Up to 12 exam scores are reported in the LSDAS report. Exam scores are averaged when more than one reportable score is on file.
- Writing sample copies: If more than one LSAT has been taken, photocopies of the last three LSAT writing samples are provided in the LSDAS report.
- Copies of Letters of Recommendation if processed by LSAC.

## Law School Admission Test (LSAT)

The Law School Admissions Test (LSAT) is a half-day standardized exam that is designed to measure skills that are considered essential for success in law school. It is comprised of five 35-minute sections of multiple-choice questions and is scored on a scale of 120-180. One of the five sections is un-scored and used to pretest new test items and forms. In addition to the five sessions, a 30-minute writing sample is administered at the end of the test. The test is divided into the following five sections:

- 1 Reading Comprehension
- 1 Analytical Reasoning
- 2 Logical Reasoning
- 1 Experimental section (un-scored section)

It is suggested that applicants take the LSAT no later than December for admission in the following fall's entering class.

## Recommendation Letters and Dean's Letter/Certification:

<http://careers.mit.edu/preprof/>

Applicants need at least two letters of recommendation. It is preferable to have two academic letters, however, some schools will accept one letter which is a non-academic letter of recommendation.

We recommend that you ask people to write you a letter of recommendation early in the fall of the application year, and give them at least one month to write your letter of recommendation. The best recommendation letter will come from an individual who knows you best. Provide your recommenders detailed information to ensure that your letters will have accurate information regarding your

activities, such as dates and places you worked. If you take responsibility in giving your recommenders solid information in writing, you help yourself in getting solid, informative letters of reference.

On the Letter of Recommendation Form, provided through the LSDAS, candidates have the choice to waive their rights to see their letter of recommendation. The assumption is that a waived letter of recommendation is bound to be more candid. However, please note that law schools do not hold it against candidates if they choose to retain their rights to the letters.

A Dean's letter or certificate provides information on whether there have been any academic or disciplinary action taken against the applicant during their undergraduate career. This document also confirms an applicant's GPA and/or class rank. To obtain a letter from the Dean of Undergraduate Education at MIT, visit the Registrar's Academic Records office located in room 5-119.

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## Pre-MBA Information

Are you considering pursuing an MBA? Self-assessment can help you decide if an MBA is the right degree for you. It will also help you to convince business school admissions counselors about your motivations for wanting to earn an MBA. Admission counselors will look for evidence of your professional interests and how that ties into the MBA degree as well as your leadership potential and academic achievement. A typical MBA candidate has a few and sometimes several years of full-time, post-undergraduate work experience in a responsible capacity.

Informational interviewing is another powerful tool to help you in this process by answering questions such as what are typical MBA careers and which industries actively recruit MBAs. The Institute Career Assistance Network (ICAN) is a good place to get names of alumni/ae in the specific field in which you are interested. You can access this database online at: <http://alum.mit.edu/benefits/CareerGuidance/ICAN>, click on Get Connected.

Once you have decided that an MBA is indeed right for you, there are many things to consider when selecting a school. Schools vary significantly on teaching strategy, financial aid, geographic location, student population, faculty, institution, and cost of the program. Choose criteria that are important for you and choose a school that matches it. It is also important that you fit in with the culture of a school. Visit <http://www.mba.com> and <http://www.gmac.com> to gather additional information.

## GMAT

The Graduate Admission Management Test (GMAT) is a standardized assessment designed to measure the qualifications of applicants for business and management studies programs. It assesses your verbal, mathematical and

analytical writing skills. The test consists of three sections: (1) Analytical Writing Assessment, (2) Quantitative Section, and (3) Verbal Section. Total GMAT scores range from 200-800. Two-thirds of test takers score between 400 and 600. See <http://www.mba.com>.

## References

When considering references for your applications to business school, be sure to ask people who know you very well. The more specific they can be about your candidacy for an MBA, the stronger will be your application. If the school does not specify from whom you should obtain references, try to choose people with whom you have worked in different settings, such as previous employers.

## Interview

The interview process may vary depending on the school to which you are applying. For the most part, interviews are by invitation only and cannot be requested. During the interview, demonstrate strong interpersonal skills while you develop a clearer feeling for the school. In preparation for a business school interview, the MIT Career Development Center recommends that applicants participate in a mock interview and review the Winning Interview Techniques workshop online, <http://web.mit.edu/career/www/workshops/interviewing.pdf>.

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## Academic Career

Nearly half of the doctoral graduates of MIT pursue an academic career (junior faculty position or postdoc) upon completion of the doctoral degree. The Career Development Center offers several services for those considering an academic career:

- CV Workshop (offered each semester, and available online at <http://web.mit.edu/career/www/workshops/cv>. (Also see "Related Links" on this site.)
- Workshop on Preparing for the Academic Job Interview. Emphasis is on the on-site interview day beyond the job talk. (Offered each semester.)
- Individual advice on any aspect of the academic career search (call 617-253-4733 for an appointment).
- Academic Career Series, faculty presentations on four different topics, co-sponsored by the Career Development Center, Graduate Student Council, and Postdoctoral Advisory Council. (summers) <http://web.mit.edu/provost/pds.html>.
- Bibliographies and web links on academic careers [http://web.mit.edu/career/www/graduate/academic\\_careers.html](http://web.mit.edu/career/www/graduate/academic_careers.html).

In addition, there are services available through the MIT Writing Center <http://web.mit.edu/writing> (including opportunities to practice the job talk) and the Teaching and Learning Laboratory <http://web.mit.edu/tll>.

For information about Distinguished Fellowships and other scholarship opportunities see <http://web.mit.edu/scholarships>.

Seeking a postdoctoral fellowship? See PostDoc Resources at <http://web.mit.edu/career/www/infostats/respostdoc.html>.

## Sample Statement of Research Interests

### CURRENT RESEARCH

#### *Active Control of Rotorcraft Vibration*

I am currently working with Boeing Helicopters to develop advanced control techniques for control of rotorcraft vibration, so that the vibration typically experienced by helicopters can be significantly reduced. My advisor Prof. Steven Hall and his former doctoral students developed the X-frame actuator for those purposes, and I am working on the design and implementation of the advanced Higher Harmonic Control (HHC) algorithms using the X-frame actuator for an MD-900 helicopter. The advanced HHC includes an intelligent anti-windup scheme, which shows better performance than traditional discrete HHC. The intelligent anti-windup algorithm ensures that the output signals from each controller do not saturate, so that multiple HHC systems can be implemented without causing any difficulties. The active rotor system with the advanced HHC algorithms will be flight-tested in 2003.

#### *Active Control of Noise Radiated from Underwater Vehicles*

I have worked with Northrop Grumman Corp. and Materials Systems Inc. to develop new technology for the reduction of radiated noise from vibrating underwater vehicles using smart structures technologies. This project has been funded by the Office of Naval Research, with an objective of developing “smart” underwater vehicle systems so that the enemy cannot detect attack in advance. My responsibility in this project is to develop the control architecture and methodology to reduce the radiated noise from vibrating structures. In order to accomplish this, I have designed two different controller architectures. The first one is the assembly of local controllers, which are implemented for each sensor/actuator pair to reduce its vibration level. The second one is a global controller, which makes the structure a weak radiator by coordinating the action of local controllers. In order to implement the global controller successfully, I have developed a new wavenumber domain sensing method and applied it to the feedback controller design for active structural acoustic control. The approach is to minimize the total acoustic power radiated from vibrating structures in the wavenumber domain. The new sensing method greatly simplifies the design of MIMO LQG controllers for active structural acoustic control by reducing the effort to model the acoustic radiation from the structure and allowing the systematic development of state-space models for radiating wavenumber components. Further, I have extended the concept to general complex structures, so that it can be applied for reducing radiated noise from any vibrating structures. The new sensing method is numerically validated on a thick-walled cylindrical shell with 55 piezoelectric panels mounted.

### FUTURE RESEARCH GOALS

My future research goal is to develop “intelligent structural systems”, from the micro-scales (MEMS) to macro-scales (aerospace systems and underwater vehicles), which will contain array of sensor/actuator pairs and embedded devices for controls and decision-making algorithms. Those systems should be able to coordinate large numbers of devices and adapt themselves to uncertain environmental changes in an intelligent manner. For this research goal, I will focus on the following three research areas. First, I will carry out research on structure/fluid/control interaction phenomena for complex systems. The phenomena will be critical design issues in those complex structural systems, both in micro- and macro- scales, so the fundamental understanding of the phenomena is very important to successful implementation of the structural/acoustic control algorithms. Second, I will extend my specialization in smart structures technologies to the development of advanced sensors and actuators for intelligent structural systems. Since the systems will contain arrays of embedded devices, such as micro-sensors and actuators, the development of novel sensors and actuators that can be coordinated and integrated within the systems will be critical in future areas of research. Finally, I will continue my research on advanced control and decision-making algorithms for noise and vibration reduction of complex structural systems. Some of the important requirements of the algorithms include: (1) the ability to handle many sensors and actuators in an efficient manner, (2) robustness to modeling error and uncertain environmental changes, (3) the ability to modify their functions adaptively even in the unexpected change in the plant or environment, and (4) the ability to detect the failure in the plant and maintain the performance by reconfiguring the algorithm architecture. As mentioned earlier, I have developed the novel wavenumber domain feedback controller design method for active structural acoustic control of complex structural systems, which satisfies the first and second requirements. I will continue my research to improve the performance of the method, and therefore to develop “intelligent control design methodology” for complex structural systems, so that those four requirements given above will be successfully satisfied.

## Sample Statement of Teaching Philosophy and Interests

My goal in teaching is that each and every student leaves my classroom with a solid understanding of engineering concepts and a sound background to analyze engineering systems. I strongly believe that a thorough understanding of undergraduate/graduate courses is most fundamental to young engineers for their future research. My responsibility as instructor would be to help students acquire a solid foundation in the subject matter, and to encourage them to build confidence in their knowledge of the course material, so that they can apply what they learned in my classroom to engineering problems with confidence. I have a very strong undergraduate and graduate education in mechanics, dynamics and controls. Also, I have extensive research experience in structural dynamics, acoustics, and controls, which would allow me to teach students fundamental concepts of engineering systems thoroughly. My primary interests in undergraduate/graduate level teaching lie in the following areas:

### UNDERGRADUATE LEVEL

- **Mechanical Vibration**— This course would involve basic introduction to mechanical vibration, including free and forced vibration of single- and multi-degree of freedom systems, fundamentals of frequency and modal analysis, and approximate solution techniques.
- **Engineering Mathematics**— This course would be an undergraduate-level introduction to engineering mathematics, including linear algebra, differential equations, complex analysis, Laplace and Fourier transform, etc.
- **Feedback Control of Dynamic Systems**— This course would involve introduction to design of feedback control systems, focusing on properties and advantages of feedback systems, time-domain and frequency-domain performance measures, stability and degree of stability, root locus method, Nyquist criterion, and frequency-domain design.

### GRADUATE LEVEL

- **Advanced Structural Dynamics and Acoustics**— This course would first review single and multiple-degree-of-freedom vibration problems, using matrix formulation and normal mode superposition methods. Then, this would present various topics in structural dynamics and acoustics, including time and frequency domain solution, random vibration, vibration and noise measurement and analysis techniques, wave motions in structures, structure/fluid interaction problems, and acoustic radiation.
- **Control of Structures**— This course would present fundamental control-structural dynamic interaction from a unified viewpoint, applicable to active control of flexible structures, and active structural acoustic control of structural systems.
- **Multivariable Feedback Control Systems**— This course would be an introduction to the state-space approach to control system analysis and control synthesis, focusing on design of “robust” controllers for mechanical systems, including optimal control methods and the Kalman filter.
- **Continuous and Discrete Time Signal Processing**— This course would provide a theoretical foundation of signal processing techniques necessary for mechanical engineers. This course would focus on the analysis and processing of experimental data, and real-time experimental control methods, including Laplace and Fourier transform, spectral analysis, filter design, system identification.

These present general topics and I would be happy to teach more specific courses according to the needs of the students and the department.

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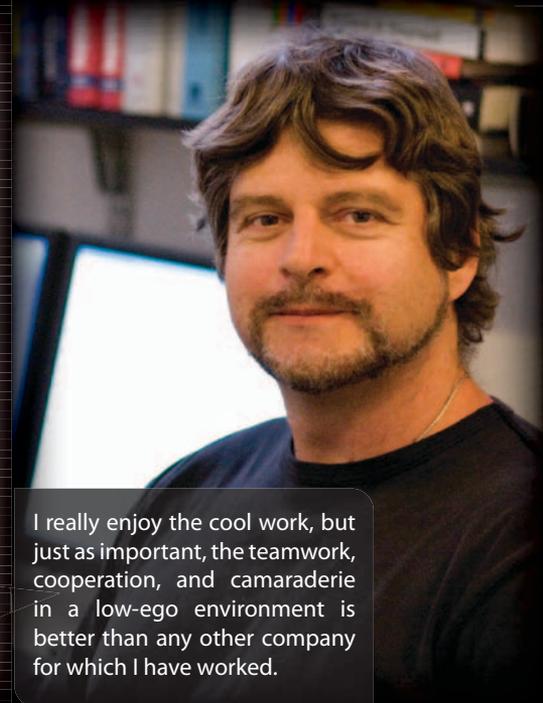
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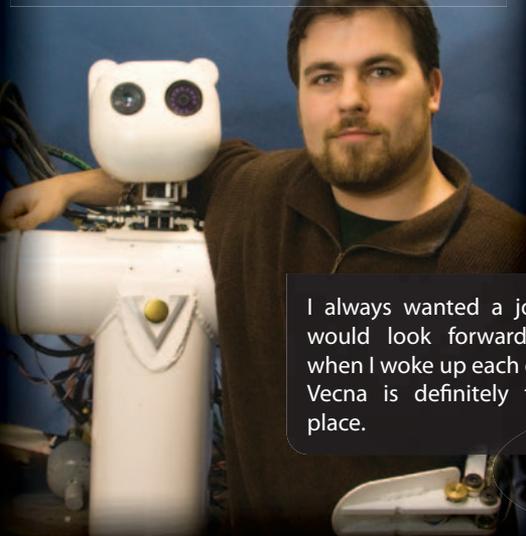
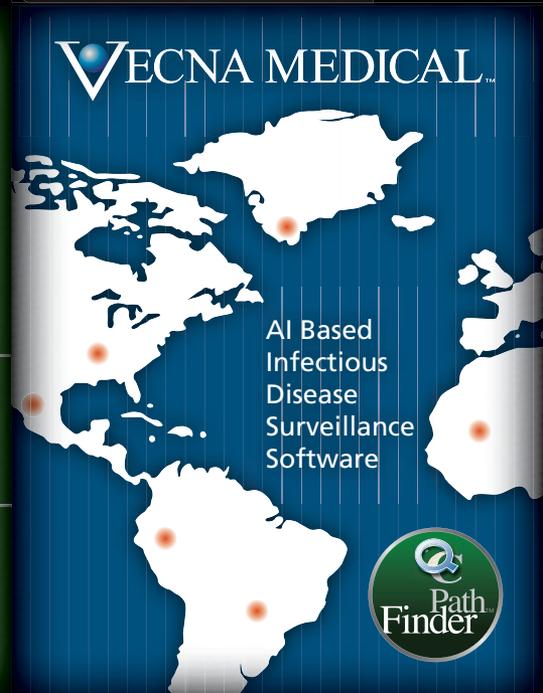
Working at Vecna is great mental exercise; learning, solving tough problems, taking-on new responsibilities and having fun are all integral parts of the job.

I really enjoy the cool work, but just as important, the teamwork, cooperation, and camaraderie in a low-ego environment is better than any other company for which I have worked.



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