# QUICK TIPS FOR FINDING A
# HUMAN FACTORS/ERGONOMICS JOB IN INDUSTRY



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## Introduction

This publication was developed to assist you in launching a successful career as a human factors/ergonomics (HF/E) professional in industry. Our aim is to help you manage the challenges that arise while moving from an academic environment or from a job in another field to a career in HF/E.

Despite ups and downs in the industrial job market, employment prospects can be outstanding for well-qualified candidates. Regardless of the state of the market, the tips in this brochure will help you improve your chances of success as an industry professional.

Employers today have higher expectations for new hires than they did 5, 10, or 20 years ago. Candidates must understand specifics about the employer's industry, but they should also be able to see the big picture involved in a project and to know how to apply human factors principles, frameworks, and techniques. Candidates should have a record of accomplishments, even while in graduate school, such as publications, presentations, and leadership assignments. In all cases, leadership and communication abilities are crucial.

We included guidance on what to study in school, how to secure an internship, how to seek and secure a job, and how to utilize Human Factors and Ergonomics Society (HFES) resources to support your efforts. Although membership in HFES is recommended, it is certainly not required; several of the resources suggested at the end of this brochure are available to anyone.

We believe there are three essential elements to succeeding in your career search: educational achievements, internship experience, and networking. The sections below cover these areas, as well as tips on interviewing, writing a résumé, getting ahead in the first year on the job, and using HFES resources to locate and achieve success in a great job.

## Educational Achievements

While still an undergraduate, do a job search at least two years before you consider entering the job market to identify educational and experience requirements for jobs that interest you. Use those requirements to guide your academic and internship choices. (See the next section for more details about internships.)

If you haven't already decided to attend graduate school, consider doing so by the beginning of your senior year. Although historically a graduate education was requisite for a human factors career, numerous recent job listings require only an undergraduate degree, if candidates have a strong technical background in a discipline such as software engineering.

If you decide to pursue a master's or doctorate, select a school and an adviser that can offer you a program that matches your personal interests. Start by reading the HF/E literature, browsing the free *HFES Directory of Human Factors/Ergonomics Graduate Programs* (download the PDF booklet from http://www.hfes.org/Publications/GradSchools.html), and networking with people who are doing the type of work you would like to do. Find out where they went to school and inquire about the programs that school offers. (If you want to earn a Ph.D., apply to schools offering doctoral programs, because if you choose a university offering only a master's and then transfer to a Ph.D. program elsewhere, you may spend more time in school than you had originally envisioned.)

After you select a school and a prospective adviser, meet with him or her to confirm that your interests match.

Once you've entered a graduate program, evaluate your academic goals with respect to your current or future circumstances and create a career "road map." The road map should show key skills you wish to develop and key experiences you wish to gain to prepare for the job market following a structured time frame. Follow your career road map, and make changes as needed.

Talk to other graduate students in your program to identify some of the perks and pitfalls of your department's program, teaching or research assistantships, and internships that are typically available.

In conjunction with your academic adviser, identify faculty members (both regular and adjunct) who could serve as master's and doctoral committee members as well as links to internships and job opportunities.

Learn to manage your time efficiently, and set priorities for what you need to accomplish in and out of the classroom. In your industry career, you will frequently be working on multiple projects and will be required to set priorities in order to meet your deadlines.

Consider taking courses outside your major department that may help you in your career. Examples include computer science/software engineering, marketing, industrial design, or aviation, depending on your interests. In your career, you'll often be part of a multidisciplinary team, and having taken courses in other departments will prepare you for the different approaches others bring to the work.

Regularly seek feedback on your presentations, papers, and performance on team projects. This information will help you improve your performance in the future, and the habit will also teach you how to accept on-the-job criticism gracefully, an attribute many employers appreciate.

## Internship Experience

Do one or two internships in areas that interest you. Internships are critical for helping you identify whether industry is right for you. The information you gain about an industry can be used in other internships and in permanent jobs.

Scheduling an internship toward the end of your academic career has many benefits. First, you will already have acquired basic knowledge through your early course work, and second, the closer you are to graduating, the better your chances are for turning an internship into a permanent position.

Look for unique internship opportunities that provide strong mentors and role models, as well as a variety of job experiences. You will learn more about yourself and which facets of HF/E work are most exciting to you. Look for internships where the manager or mentor understands and supports the belief that school is your number one priority.

Identify companies that have a reputation for offering high-quality internships and for hiring their interns after graduation. For example, you might talk to students and recent graduates at HFES and similar meetings. Your sources might tell you about companies that tend to lure students into full-time jobs before their education is completed. Consider avoiding any company that makes "now or never" job offers to you before you can reasonably be expected to finish your degree; that company might not have your long-term career development as a high priority.

Be polite and professional. Kindness, cooperation, and courtesy before, during, and after your internship send a strong, positive message about your character. Send thank-you letters during all phases of the process.

Before starting the internship, discuss with your manager what you would like to accomplish and learn during your term. You should be doing tasks that are beneficial to you and the company, but expect to do a little "grunt" work some of the time.

Be professional when making suggestions, especially when your only source of knowledge is a textbook. Understand that what you have read in books may not necessarily be put into practice in the real world. Other factors influence business decisions besides usability, and that is an important aspect of what your internship can teach you.

As you complete work, and if the company's confidentiality rules permit, prepare presentations or reports for your portfolio. These will be of help in your job search. If possible, publish them or submit them for presentation at HFES annual meetings and conferences of related organizations.

Find out what your manager/mentor can or will do to help you secure a permanent job. Periodically, keep in touch with him/her until you are firmly established in the working world.

## Networking with HF/E Professionals

To network, you will need to
1. Make contact with people you don't already know.
2. Get their contact information and save it. Make sure they have yours.
3. Keep in touch with them, and remind them where you met, if necessary.

Following are some ideas about where to network.

Attend local chapter meetings of HFES and related organizations, whether you're just thinking about your career, still in school or an internship program, or seeking a job. Seek out individuals who seem to be the best mentors, introduce yourself, and send them follow-up letters or e-mails to let them know when you're ready to work. Attach a current résumé.

Attend the HFES Annual Meeting and meetings of related organizations. When you meet people doing work that you would like to do, ask them what you should do to prepare. Also, volunteer to help at the HFES Annual Meeting (or other trade or professional meetings) where you're likely to meet employers. Visit the Placement Service, or attend a workshop or Professional Development Seminar on a topic of interest to you.

Ask professors and alumni (particularly those of your mentor, if you know who they are) to help you make contact with professionals in the sector you want to enter. Alumni working in a company or industry you want to work in may be willing to help distribute your résumé to hiring managers and/or colleagues working for other employers. Ask people you meet at HFES local chapter meetings or the Annual Meeting for similar assistance.

Join the HFES volunteer database (310/394-1811 or membership@hfes.org). While serving as a volunteer, you may meet people who can help you connect with prospective industry employers.

## Tips for Writing Effective Résumés

Create a targeted résumé for each prospective employer that includes a clear and compelling Objectives section describing the kind of position you want and highlighting the skills that prove you qualify.

In the Skills section, highlight your technical competencies, especially your background in human factors, prototyping/computer programming (if applicable), communication, and leadership. Use key words (sometimes résumés are machine-scanned for relevant terms), but don't list every computer application or platform with which you're experienced.

In the Experience section, highlight the results of your efforts in each job listed. Identify the personal strengths and skills you used to achieve those results.

Always send a cover letter stating the position you're applying for, highlighting pertinent skills, and explaining why you are a good fit for the position. Typically, résumés sent without cover letters do not receive as much attention as they deserve.

## Tips for a Successful Job Search and Interview

HF/E positions are found under a variety of names, such as software engineer, human factors professional, ergonomist, and psychologist as well as information architect, interaction designer, contextual researcher, ethnographer, usability specialist, and user experience engineer. Become familiar with the range of job titles so you don't miss any opportunities when reading job listings on Web sites and when networking at HFES Annual Meetings.

Read the job announcement carefully. It provides essential details about the job requirements and responsibilities.

Use the company's Web site or other resources (members of your personal network, for example) to gain basic knowledge about the company. Think about the kinds of experience you'd like to gain, and consider how well the company's opportunities match your requirements.

Be prepared to discuss your work in a formal presentation or informally. If someone describes a specific project or scenario, expect him or her to ask, "What would you do next?"

Be confident, clear, and concise when you answer questions. Employers are looking for people who can think on their feet and then respond quickly and accurately.

Be relaxed and honest, and remember that you are interviewing the employer as much as you are being interviewed.

Ask lots of questions, and ask the same questions of multiple people; for example, about the positioning of HF/E professionals within the company, or about the values and culture of the company or team. This will help you determine the company's general climate and whether you would be comfortable there. It also shows the interviewer that you have an inquiring mind, which is a critical attribute for people in the HF/E field.

Ask one or two employees to describe one thing they like and one thing they dislike about their jobs. You may gain important insights about the company that you may not receive from the hiring manager.

Do not base your decision solely on salary. Consider all the factors, such as company culture, opportunities to do the work you want to do, equipment availability, opportunities for advancement, benefits of working with particular colleagues, quality of the management team, opportunities to develop professionally and enhance your skills, and the benefits package.

## Tips for Success in Your First Year

Develop relationships, and be prepared to learn new things. Industry jobs typically require teamwork, so your success is often dictated by how well you interact with others in the organization. Learn who the key players are (including secretaries, computer support staff, and lab technicians), and don't be afraid to ask for help when you need it.

Find someone who is interested in your success and make him/her your mentor, formally or informally. This person does not need to be a member of any of your teams. Communicate frequently with your mentor and/or manager about what you need or would like to do to help bring about your professional growth and accomplish what is expected of you. This will help you to set priorities and do your job more efficiently and effectively. It may also prevent surprises during performance reviews.

Project enthusiasm and the desire to go above and beyond the minimum requirements. Your approach to the job can make you stand out.

Be flexible. Strive to do the best you can with what you are given; if resources are limited, strive to make things better, rather than perfect. This will help reduce your stress while satisfying most of the people you work with.

Don't let your manager be caught by surprise by a client's complaint or a missed deadline because you were in over your head. If you sense you are lost, overworked, or faced with a very challenging problem, talk to your manager early and bring some possible solutions to the discussion. This can make it easier for both you and your manager, and it shows that you are a problem solver.

Be prepared to speak in many "languages." You will often be working in multidisciplinary teams. If you are able to speak and understand the jargon of your teammates, you will have a much better chance of implementing user-centered design features into your product. For example, if you demonstrate a knowledge of coding concerns while working with software engineers, you will be far more successful than if you understand only the user interface.

## Career Support Available through HFES

The Human Factors and Ergonomics Society has a number of resources for gaining experience, networking, and finding a job.

*Placement Service*
HFES offers an on-line Placement Service at **http://hfes.org** to help you find a job or internship. Candidates may post résumés or search the job listings free of charge. Keep an updated copy of your résumé in the database. During the HFES Annual Meeting, the Placement Service also offers opportunities to schedule interviews with representatives from companies offering positions.

*Annual Meeting*
The HFES Annual Meeting provides an outstanding opportunity to network with HF/E professionals. While you're there, attend as many Technical Group (TG) business meetings as possible, because they are typically small sessions that are more conducive to networking. Attend the Opening Reception (usually on the first night of the meeting) and meet as many people as you can. Attend the annual Career Panel and ask questions. Talk to the panelists at the conclusion of the session.

*Student and Local Chapters*
If there is an HFES local or student chapter near you, become involved with its organization, planning, and leadership. Student chapters offer outstanding opportunities to network. People frequently make initial contacts for internships at chapter meetings. Fellow chapter members can form a network of peers and colleagues that will exist throughout one's career. Also, go to the HFES Web site and connect with chapter and technical group Web sites. Some of them post job and internship openings.

*Directory and Yearbook*
Use the *HFES Directory and Yearbook* and the on-line directory at the HFES Web site to locate professionals who share your professional interests. (HFES membership is required to access the on-line directory.) Contact them early in your academic career via phone or e-mail for career advice.

*Resource Guide*
Read "Preparing for a Career in Human Factors/Ergonomics: A Resource Guide," published by HFES. It provides summaries of HFES Career Panels for the past several years, as well as reprints of selected HFES articles. The most up-to-date edition may be purchased from HFES for $10 (includes shipping/handling; add California sales tax if applicable).