

Finding Jobs

Working

STAT8801
Statistical Consulting

School of Statistics
University of Minnesota

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All this consulting stuff is pretty academic without a job. So ...

- Jobs: Finding openings.
- Jobs: Getting hired.
- Jobs: Keeping them.

We'll cover the first two.

Printed sources

Two principal sources for statistics:

- *The Amstat News*
- *The IMS Bulletin*

The IMS Bulletin jobs are mostly academic.

The Amstat News jobs are a mix of academic, industry, and government.

There are also electronic versions. See www.imstat.org/bulletin/ or <http://jobs.amstat.org/search.cfm>

Amstat News

Job Search Results [ASA JobWeb]

<http://jobs.amstat.org/search/results/index.cfm?display=print&>

Search Results

69 jobs found Posted Within | All Active Jobs | View: Quick | Summary

[New Search](#) • [Refine Search](#) • [Make This Search a Job Agent](#)

POSTED	JOB TITLE	COMPANY	LOCATION	SAVE
Apr. 13, 2007	Care Management Health Data Analyst	Johns Hopkins HealthCare	US - MD - Glen Burnie	<input type="checkbox"/>
Apr. 13, 2007	Statistical Geneticist	Affymetrix, Inc.	US - CA - Santa Clara	<input type="checkbox"/>
Apr. 13, 2007	Director, Discovery Statistics - CVU CEDD	GlaxoSmithKline	US - PA - King of Prussia	<input type="checkbox"/>
Apr. 13, 2007	Biostatistician	The Rockefeller University	US - NY - New York	<input type="checkbox"/>
Apr. 13, 2007	Assistant Professor	Clayton State University	US - GA - Morrow	<input type="checkbox"/>
Apr. 13, 2007	Research Analyst Positions	ChapterHouse, LLC	US - IL - Lisle	<input type="checkbox"/>
Apr. 12, 2007	Principal Research Statistician - Pharmacokinetics	Abbott Laboratories	US - IL - Abbott Park	<input type="checkbox"/>
Apr. 12, 2007	Assistant Professor - Statistics	Texas A&M University-Kingsville	US - TX - Kingsville	<input type="checkbox"/>
Apr. 12, 2007	Chief Scientist	One Technologies, L.P.	US - TX - Dallas	<input type="checkbox"/>
Apr. 12, 2007	Research Statistician-Data Mining	SAS Institute, Inc.	US - NC - Cary	<input type="checkbox"/>
Apr. 12, 2007	Research Statistician - Algorithm	SAS Institute, Inc.	US - NC - Cary	<input type="checkbox"/>

USA: California

University of California, Davis Department of Statistics

The Department of Statistics invites applications for one position that can be either tenured Associate Professor or tenure-track Assistant Professor, depending on qualifications, to start on July 1, 2007. Applicants must have a Ph.D. in Statistics or in a related field and should be working in one or more of the following areas: statistical signal processing or image analysis; modern time series analysis; statistical theory for algorithms; statistical computing (algorithms and applications to statistical methodologies). An outstanding research and teaching record is required for appointment a tenured Associate Professor. Demonstrated interest and ability to achieve such a record is required for a tenure-track Assistant Professor appointment. The successful candidate will be expected to teach at both the undergraduate and graduate levels. UC Davis has launched initiatives in Astrophysics, Bioinformatics, and in Computational Science. The Department has graduate programs in Statistics and in Biostatistics. Information about the Department and its programs can be found at <http://www.stat.ucdavis.edu/>. Email letter of application, including a statement of research interests, and curriculum vitae with publication list to search@wald.ucdavis.edu. Send at least three letters of reference, relevant reprints/preprints, and transcripts (from applicants with Ph.D. obtained in 2005 or later) to:

*Search Committee
Department of Statistics
1 Shields Avenue
University of California, Davis
Davis, CA 95616*

Review of applications will begin on Dec. 1, 2006, and will continue until the position is filled. The University of California is an affirmative action/equal opportunity employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

Industry and government jobs come open more or less year round.

Academic jobs are advertised October through February.

Academic interviews are generally January through April for jobs beginning in August or September.

Sometimes late surprises.

Announcements

We have a clipboard of job announcements/fellowships/etc posted across from 313 Ford.

University of Florida has a "virtual" job board at:

www.stat.ufl.edu/vlib/jobs.html.

Mostly academic, some non-academic.

Joint Statistical Meetings

The JSM has a Career Placement Fair each August, this year in Washington, DC.

For a small fee, you can interview with recruiters from many companies (e.g., Amgen, Abbott Labs, Capitol One, Fannie Mae, John Deere Credit in 2008).

Word of mouth

Rare for academic jobs, common for industry jobs.

Networking helps!

You know someone, who knows someone, who knows about a job.

ASA has local groups, such as

<http://sitekreator.com/ASATwinCities/index.html>

Web Sites

You've seen the ads.

For example, www.monster.com had 188 job listings for statisticians on 4/25/2008.

Head Hunters

Err ... employment search professionals.

- Generally costs you nothing.
- They get paid by employer to fill the job.
- They frequently know about unadvertised jobs.
- Some attend JSM.

Where to work

- 1 Universities, both academic and staff.
- 2 Pharmaceutical/medical companies.
- 3 Government.
- 4 Banking, credit and the like.
- 5 Marketing.
- 6 Think tanks (e.g., Rand Corp).
- 7 Research organizations.
- 8 Business research groups (e.g., Best Buy).
- 9 Many others.

Pharmaceutical Industry

Rocco Brunelle (ASA Consulting Newsletter 2000) says roles of statistician are changing.

Old way:

- Member of self-managed team.
- Time lines present, but subordinate to quality analysis.
- Lots of background, refinements, and tuning of studies.

New way:

- Short, aggressive time lines.
- Analysis needed within days of data.
- Much up front planning needed for analysis.

CRO

Contract Research Organization (Quintiles, Trilog, etc).

Hired guns brought in by drug companies.

Drug company pays CRO by hour worked, CRO pays statistician a salary. (Some drug company depts. run like internal CROs.)

You get lots of experience in a hurry.

Could be on or off site work.

You earn a fraction of what the drug company pays the CRO for your work.

Basics

How do you get a job?

- Background/education
- Experience
- Résumé/CV
- Interview

Academic job

Usually requires PhD.

The following may you an interview:

- Published papers.
- Letters of recommendation.
- Teaching experience.
- Degree from good program.
- Better grades.

Grades almost irrelevant more than a couple years after degree.

Industry job

Requirements much more varied.

Generally much less, or no, interested in research.

They want to see:

- **Communications skills.**
- **Interpersonal skills.**
- Technical skills.
- Organizational skills.
- Computing skills (sometimes).
- Good grades.
- Subject-matter knowledge.

Résumé/CV

This is where you need to catch their eye.

The Résumé or Curriculum Vitae lists background, experience, accomplishments, goals, references, etc.

Academic and industrial résumés are very different!

The CV

Academic CV lists practically everything you've done.

- Biographical information.
- Education.
- Employment history.
- Publications.
- Talks given.
- Courses taught.
- Students advised.
- Service.
- Grants.
- Awards.

The Résumé

Industrial résumé is a different animal.

The job of a résumé is to get you an interview.

Usually just a single page.

Review, summarize, and present your experience and achievements and your job goal.

Your résumé needs to interest them in you in just a few seconds.

Tips

The internet is full of résumé tips ... just Google `resume tips`. Here are some from <http://jobstar.org/tools/resume/yana.php>

- 1 Your résumé is your marketing tool, not a personnel document.
- 2 It is about YOU the job hunter, not just about the jobs you've held.
- 3 It focuses on your future, not your past.
- 4 It emphasizes your accomplishments, not your past job duties or job descriptions.
- 5 It documents skills you enjoy using, not skills you used just because you had to.

More tips from Yana

1. Choose a target job (also called a "job objective"). An actual job title works best.
2. Find out what skills, knowledge, and experience are needed to do that target job.
3. Make a list of your 2, 3, or 4 strongest skills or abilities or knowledge that make you a good candidate for the target job.
4. For each key skill, think of several accomplishments from your past work history that illustrate that skill.
5. Describe each accomplishment in a simple, powerful, action statement that emphasizes the results that benefited your employer.

More tips from Yana

6. Make a list of the primary jobs you've held, in chronological order. Include any unpaid work that fills a gap or that shows you have the skills for the job.
7. Make a list of your training and education that's related to the new job you want.
8. Choose a résumé format that fits your situation—either chronological or functional. [Functional works best if you're changing fields; chronological works well if you're moving up in the same field.]
9. Arrange your action statements according to the format you choose.
10. Summarize your key points at the top of your résumé.

Still more tips

www.free-resume-tips.com/10tips.html has another set of tips.

- Use titles that match the job you want. So "Senior Biostatistician" instead of statistician.
- Use good design. Don't make the reader work. Design the résumé so that the important stuff stands out and is easy to find.
- Create content that sells. Don't say "Experience with SAS" try "Developed SAS program to manage 5,000 subject clinical trial."
- Quantify and use power words. Direct, supervise, organize, etc.
- Analyze key skills in job descriptions. Revise your résumé to emphasize those skills.

Still more tips

- Identify hidden needs. The ad may suggest they need something more; can you fill the need they didn't know they had?
- Push the benefits of your skills. "Cut product defect rate by 35%."
- Create the image of the salary you're asking for.
- Prioritize the content and organization to match the job being

Repeating the obvious

www.jobweb.com has some more mundane, but useful, suggestions.

Name, address, telephone, e-mail address, web site address should go at the top of your résumé.

- Avoid nicknames.
- Use a permanent address and phone number (with area code). Make sure your answering machine message is neutral.
- Add your e-mail address. Use a professional sounding address, not `studmuffin23@yahoo.com`.
- Include your web site address only if it reflects your professional ambitions.

Content

Next comes your Objective — what kind of job you're seeking. Be specific and try to tailor the objective to the specific employer and job.

Education

New graduates list education next. Those with more experience move education below work experience.

- Your most recent educational information is listed first.
- Include your degree, major, institution, dates attended.
- Add your grade point average (GPA) if it is high.
- Mention academic honors.

More content

Work Experience

Briefly summarize jobs that taught you skills. Use action words to describe your job duties.

Include your work experience in reverse chronological order. Include:

- Title of position,
- Name of organization
- Location of work (town, state)
- Dates of employment
- Describe your work responsibilities with emphasis on specific skills and achievements.

References and check

References

Ask people if they are willing to serve as references before you give their names to a potential employer.

Do not include your reference information on your résumé. You may note at the bottom of your résumé: "References furnished on request."

Check your résumé!

Then check it again, and have someone else check it. Check it for spelling and grammar.

Design

- Use white or off-white paper.
- Use 8-1/2- x 11-inch paper.
- Print on one side of the paper.
- Use a font size of 10 to 14 points.
- Use nondecorative typefaces.
- Choose one typeface and stick to it.
- Avoid italics, script, and underlined words.
- Do not use horizontal or vertical lines, graphics, or shading.
- Do not fold or staple your résumé.
- If you must mail your résumé, put it in a large envelope.

The Interview

The résumé or CV gets you in the door, the interview gets you the job.

Again, lots of advice on line, just Google "job interview tips."
We'll cover a few of the many suggestions.

US Bureau of Labor Statistics

www.bls.gov/oco/oco20045.htm offers the following: Preparation:

- Learn about the organization.
- Have a specific job or jobs in mind.
- Review your qualifications for the job.
- Prepare answers to broad questions about yourself.
- Review your résumé.
- Practice an interview with a friend or relative.
- Arrive before the scheduled time of your interview.

More BLS

The interview:

- Relax and answer each question concisely.
- Respond promptly.
- Use good manners.
- Learn the name of your interviewer and greet him or her with a firm handshake.
- Use proper English—avoid slang.
- Be cooperative and enthusiastic.
- Use body language to show interest.
- Ask questions about the position and the organization, but avoid questions whose answers can easily be found on the company Web site. Also avoid asking questions about salary and benefits unless a job offer is made.
- Thank the interviewer when you leave and, as a follow-up, in writing.

More BLS

Personal appearance:

- Be well groomed.
- Dress appropriately.
- Do not chew gum or smoke.

Test (if employer gives one):

- Listen closely to instructions.
- Read each question carefully.
- Write legibly and clearly.
- Budget your time wisely and don't dwell on one question.

More BLS

Information to bring to an interview:

- Social Security card.
- Government-issued identification (driver's license).
- Résumé.
- References. Get permission before using anyone as a reference. Make sure that they will give you a good reference.
- Transcripts.

More tips

www.adguide.com/pages/articles/article35.htm has the following tips:

- Know the company (do your homework).
- Know yourself (how can you help the company?).
- Know your job history (review achievements and experience).
- Know the questions. "Tell me about yourself." Ask yourself, "If I were hiring someone for this position, what would I want to know?" Be ready for tough questions. Think of the worst questions you could be asked about your experience and abilities, then prepare positive responses.
- Prepare questions of your own. (Examples: Where does this position fit into the company as a whole? Is there any problem on this job with waste/accuracy/meeting quotas, etc.? What is the largest single problem facing your staff now?)
- Psych yourself up to get ready.

More tips

Make a Good First Impression

- First five minutes crucial.
- Be punctual.
- Dress professionally.
- Be well groomed.
- Firm handshake.
- Body language. Stand straight, move confidently, and sit slightly forward in your chair.

Questions

"Tell us about yourself," is a standard question. But there are many more.

Search on line for questions, or find a book in the library.

For example, jobsearch.about.com/od/interviewquestionsanswers/a/interviewquest.htm has dozens of sample questions and guidance on answers.

Be prepared to answer (or avoid) the salary question.

More tips

Conduct the Interview.

- Have your own agenda and know where the interview should be heading.
- Enthusiasm and eye contact. Nod and gesture in moderation.
- Listening skills. Listen carefully and ask questions to probe deeper into what the interviewer is telling you.
- Communication skills. Good grammar and articulate speech are essential.
- Never make negative statements about previous jobs or employers.

Follow Through

- Write thank-you/follow up notes to the people you met at the company. In your letter, be sure to summarize your conversation and re-emphasize the skills you would bring to the position. Thank them for their time and ask if it's all right to call later in the week.

Academic Interview

These are a bit different from industry.

- Many thirty minute one-on-one meetings with many faculty (check them out ahead of time on web).
- Usually talk with a dean.
- Give a job talk on your research.
- Often talk with graduate students.

You're generally trying to impress them with your research and communication skills and show them how good a colleague you would be.