



How to find a
job in private
industry with a
math degree

J. M. Linhart

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The most important question is what do you really want to do?

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You can't find the right job for you if you don't have a pretty clear picture of what that is.

How can you figure this out?

- **Introspection:** What work or work-like experiences have you had and what made you enjoy them?
- **Career center:** They have tests to help people figure this out.
- **Recommended book:** What Color is Your Parachute by Richard N. Bolles. Older editions are fine, and available cheap.

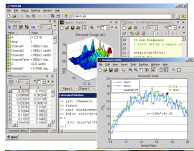


What sorts of jobs are out there?

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- Math and statistical software
- Actuarial/insurance
- Wall Street/Finance/Banking
- Computer industry (Google, Amazon, Apple, Intel)
- National Laboratories
- Aerospace (Boeing)
- Oil industry/consulting (BP, Shell, Schlumberger)
- Telecommunications





Where should you look for jobs?

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- **College career center and career fairs.**
- Online networking sites: <http://linkedin.com>
- Online job listing sites, e.g., <http://monster.com>,
<http://mathjobs.com>
- **Face to face networking:** family, friends, professors,
professional contacts.



Networking is the one thing that is most likely to land you a job.

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- Plan on asking a lot of people about opportunities.
- Plan on making a lot of phone calls.
- Plan on writing a lot of letters.
- Plan on **not** making headway quickly. But keep at it.
- Ask for informational interviews.
- Ask for names/contact information of people who might be able to help you.
- Things won't happen quickly. But keep at it.



What are employers looking for?

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The Three Things Employers Look for in New Grads

- Communication Skills (Written and Oral)
- Programming Skills
- A Capstone Project

Of course they always have list of specific skills they desire:

- Passed 2 actuarial exams
- MATLAB, C/C++ programming
- Mathematical modeling
- Signal processing

Employers are always interested in recruiting talented people that they know or that their employees know.



Contacting employers and networking.

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- Professional resume. Lead with strong points/key words that will interest employers.
- Resumes should be **short**. ≤ 2 pages.
- Always send a cover letter.
- Tailor your cover letter.
- Proofread, proofread, proofread, **proofread**.
- Many companies do not respond to letters. Expect nothing. But keep trying.

Expert help:

<http://writingcenter.tamu.edu>



Interviewing basics.

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- Practice. Schedule a mock-interview.
- Know the dress code, dress well, but fit in.
- Know about the company. What do they do? Who are their customers?
- If you don't know, express genuine interest in finding out.
- They are interviewing you, but you are also interviewing **them**.
- **Display good listening skills. Ask** people about themselves and their jobs.
- **Ask** about what is important to the company for the person filling this position. What is their ideal candidate like?



More on interviewing

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- Be prepared to talk about what you can do for the company interviewing you.
- Be prepared to talk about what you have done to someone who is not an expert in your field.
- Be prepared to talk about a failure of yours, but in such a way that it is a net positive.
- Get the names of every person you interview with, and thank them (email is fine) individually afterwards.
- Bonus points for remembering something about their conversation with you.



Still more on interviewing.

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- Do not hesitate to ask to come back to ask more questions, or if a key person was out the day you interviewed.
- Notice how the company treats you through the interview process. This is a harbinger of things to come.
- Sometimes people interviewing you might not be very nice to you.
- Do not discuss salary before a hiring decision has been made.



So you got offered a job or are going to be offered a job, now what?

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- **FIRST: do you want to work for this company?**
- **There are a lot of good books on negotiating.** Read one.
- Know what the standard salary range is for the position you are to be offered. Search the web, use the career center, there are some websites where you pay for this type of information.
- **Try to get them to give the first salary number.**



More on job offers

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- Yes, you should negotiate on salary, starting date, benefits.
- You want to be able to say, I know the usual starting salary is \$X, but because of my outstanding academic record and experience in the field, I think I should be paid \$Y.
- Know what is most important to you.
- That said, unless money is an immediate concern, negotiate a later starting date. **You need some time off.** You may have an emergency that means you may not graduate when you think you will. Build in some flexibility.

Do something crazy and fun before you start your regular job.

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It will be harder, much harder, to take 2 or 3 months off later. Do it now when you can.

- Backpack in Europe or South Asia.
- Ride your bike across the USA.
- Take a long road trip.
- Volunteer somewhere.
- Take a job at a summer resort, national park, etc ... and enjoy the freedom and lack of responsibility.





Questions?

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Thanks for listening!



Credits

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Matlab desktop:

<http://www.mathworks.com>

I lost the link for the photo of 3 people at the computer!

Wall street photo:

<http://blog.doostang.com/> post on *How to break into a career on Wall Street.*

Touring bicycle:

<http://www.bikingbis.com/2006/08/21/touring-bicycle-online-photo-gallery/>