

Applying for Jobs: Non Academic Routes

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Research Horizons

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Outline

- Emphasis on PhD students. **BUT** non-academic opportunities are equally (in fact, even more) relevant for Masters' students.
- **Keep me honest:** Have had essentially always the same job for 22 years. **Still**, after my *Laurea* degree in Italy, I begun in the phone company and teaching high school, prior to coming back to get the PhD in Mathematics. Further, I relied on former student insight (B.R.).

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 - Where are our PhD students going?
 - Which avenues are there to explore?
 - How does one go about getting a non-academic job?

Placement

- PhD Placement (both Math and ACO). Last 10, 5, 2 years.

Table: Placement of PhD graduates

	10 years	5 years	2 years
Total	71	38	21
Academic	45	24	13
Non-Academic	23	13	7
Unknown	3	1	1

Note: About $\frac{1}{3}$ rd of Total went into non-academic positions and this is a stable proportion through the years.

Non Academic Placements

- Non Academic Venues.
 - MaxPlanck, Navy, Consulting, NSA, Asset Modeling, Planning Systems, Verizon, ATT, DoD, notnow.com, Retek Inc., Dynetics, Software, LANL, DE Shaw, Bank of America, Microsoft, Citigroup, MarketRx, IT, Inform GmbH (optimization software), Pace Academy, Wachovia, Wall-Street “firms”, CGG Veritas, Scoring Solutions, Kaupthing.
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- **Note:** Last two years, in spite of bad overall economy: Seemingly **all** of our PhD students got (or are getting) a professional job!
- Why non-academic?

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 - You can get better control of where to live. An academic search is usually *for the job*, in a non-academic search you may be able to first choose **where** to be. Besides, in some countries (e.g., Italy) academic jobs are scarce. Or, you just want to remain in Atlanta, where there are surely more non-academic than academic jobs!
[Food for thought: Atlanta is home to 13 Fortune 500 companies and over 1,000 international businesses!]

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 - You may want to have a more direct role in the community.

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 - Did you know that Georgia Tech also has a Co-op program? That some of your fellow PhD students have had Summer internships through Co-op and may have a job lined up waiting for them? <http://www.coop.gatech.edu>

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 - Negotiations and offers

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- [B.R.] “In finance, **headhunters** provide a lot of help, but, of course, they take a nice fee from employers for their services. That might make you less appealing to an employer if you are competing against people who don't come with that fee attached. On the other hand, a lot of direct, online applications often (usually?) fall through the cracks, and once you apply somewhere by yourself, a headhunter won't recommend you to them because it obviates their fee.”

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- What about the interviewing process?

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- What about the interviewing process?
 - [B.R.] “In defense, interviews are a lot more general and non-technical. In finance, they can be brutal. Practice lots of brain teasers, and be prepared for a lot of questions. Typical finance process: 2 or 3 phone interviews (usually involving brainteasers), maybe an online test or two, then an onsite interview that lasts all day and leaves you exhausted.”

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 - Let your interests and hobbies be known to those who may have to talk about you! E.g., bike-riding, ping-pong, music, gardening, kyte flying, [My experience ...].

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 - Why?
 - Work on school year (190 days), professional pay, gratifying.