Job Hunting in Industry and Academia

Wheeler Ruml

University of New Hampshire

June, 2013

1. PhD in heuristic search at Harvard, –2002
   ■ interviews: 0 academic, 2 industry, 1 postdoc
   ■ group manager, 2005–2007
   ■ participated in many hiring cases, led one
3. Asst prof at University of New Hampshire (UNH), 2007–2012
   ■ interviews: 2 universities, 1 college
4. Assoc prof at UNH, 2012–
   ■ on search committees for TT and non-TT faculty
Psychologically hard, but you learn about yourself

- There are many applicants. Many try once.

Lots of work, usually at a bad time

- Delay thesis polish?

It matters, but there isn’t one solution

Be friendly — it’s a small world

- other people often willing to help

Maybe 50% is up to you, much is unknowable

- luck $\propto$ preparation

Do the next job up
What They’re Thinking
Is this someone I want to spend 5–25 years with?

Complementary with existing capabilities?

◆ Someone there likes you

Will you accept?

◆ Offer is high stakes for them
◆ CRA shows many positions unfilled
◆ Provide your reasons
Schools

Research schools

- Can you bring in grant money and students?
- Are you connected?

Teaching schools

- Is this person ready and committed to teach our students?
  - culture can be very different
Industrial Lab

- Can you present to (and convince) a client?
- Are you good (by my definition)?
- Will you do applied work without prodding?
  - (careful with claims on ‘real-world problems’)
- Can I think of multiple current or upcoming projects you could help with?
- Will you let us go after new work?

Postdoc

- Will you bring new ideas?
- Will you work without supervision?
- Can you manage an on-going or upcoming project?
<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>Their View</td>
</tr>
<tr>
<td><strong>Process</strong></td>
</tr>
<tr>
<td>- Applying</td>
</tr>
<tr>
<td>- Materials</td>
</tr>
<tr>
<td>- Job Talk</td>
</tr>
<tr>
<td>- Interview</td>
</tr>
<tr>
<td>- Negotiation</td>
</tr>
<tr>
<td>Conclusion</td>
</tr>
</tbody>
</table>

**Process**
Applying

- network early
  (many postdocs arranged by fall?)
- avoid HR if possible
- deploy your advisor (they may live in fantasy world)
- CRA list
- where have people with your background gone?
- don’t apply where you wouldn’t go
Application Materials

- cover letter not insignificant
- sell your field
- statement should be proto grant proposal
- CV should be complete but not ridiculous
  - track as you go
- letters from outside your school and country
  - 4 letters don’t hurt
  - if you’re not sure, ask if they have time and can write a strong letter
  - it looks bad if they write a generic letter - help them!
- for me, packaging shows attention to detail
  - scan your signature, use LaTeX
  - buy Acrobat if necessary
- summarize teaching evaluations, even for industry
more important than learning their names
sleep = prep for questions
industry may ask more questions
choose work carefully: show depth, indicate breadth
don’t snow
teach: emphasize motivation, intuition, significance
long talks are different: signpost!
cite others, use their pictures (w/ attribution)
remote presenter, but don’t go too fast
name, title, #/## in footer. use graphics, but no effects
Interview

what is your goal?
◆ in industry: NOT more of the same
◆ think big

what do you like about the job opportunity?
◆ have explanation for
◆ any missing years
◆ why not academia/other school

never negative

have questions to ask
◆ where does money come from? how does acquisition work?
◆ travel? books? interns/students?
◆ their research, collaborations

dress like colleague (eg, shirt, carry sportcoat, no tie)
you might not have much leverage, but asking shows you have a plan

- ask your friends what’s appropriate
- be clear about your needs, tie them to goals
  - date?, relocation reimbursement?, hardware?

- be nice: your contact is probably not the decider
- make sure your thesis is done
- take a break
Conclusion
CRA list, newsletter, Taulbee survey
ACM?
Rick Reis, *Tomorrow’s Professor*
Goldsmith et al, *Chicago Guide to Your Academic Career*
Michael Ernst, Stephanie Weirich (remember: superstars)
Summary

- Hard, but you learn about yourself
- Be friendly — it’s a small world
- Maybe 50% is up to you

Good luck!
Tell your students to apply to grad school in CS at UNH!

- friendly faculty
- funding
- individual attention
- beautiful campus
- low cost of living
- easy access to Boston, White Mountains
- strong in AI, infoviz, networking, systems, bioinformatics