

Philip's notes on the tenure-track assistant professor job search

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This document: <http://pgbovine.net/guo-faculty-job-search.pdf>

My job application materials: <http://pgbovine.net/faculty-job-application-materials.htm>

Related articles: <http://pgbovine.net/faculty-job-applications-summary.htm>

[Note: In 2015–2016, I did a second faculty job search, which led me to UC San Diego. This document was written right after my first job search in 2012–2013, so some parts may sound naive or outdated. Appendix B contains extra notes from my second job search.]

Throughout a five-month period in 2012–2013, I applied for tenure-track assistant professor positions in computer science departments throughout the United States. This document contains a mix of my personal reflections and advice on the job search process. Although it's most useful for job applicants, professors on hiring committees might also like to read the perspective of a recent (very naive!) applicant.

Lots of professors have written guides on the faculty job search process, so I will try to avoid repeating their advice. In particular, I've benefited most from articles by computer scientists such as Michael Ernst [2] (my undergrad and master's thesis advisor), Matt Might [4] and John Regehr [5, 6] (my academic blogging role models), Zachary Ives [3], Jeannette Wing [10], and professors-turned-Googlers Ellen Spertus [7] and Matt Welsh [9]. UC Berkeley's career center also has a useful guide [8]. Finally, Tao Xie maintains, to my knowledge, the most comprehensive advice collection [11] for aspiring and current professors. I hope that this document complements all of these excellent resources.

Two standard disclaimers: At the time of writing, I've never served on a faculty hiring committee, so I have no idea how effective my advice actually is. Also, the more similar you are to me in terms of academic background, the more relevant this document will be to your circumstances.

1 Luck

Luck was by far the biggest contributor to the success of my job search. Unlike many of my fellow job candidates, I didn't go through graduate school planning to become a professor. And I was far from being a "model" grad student of the sort that professors in my department would proudly groom into "future faculty material." I struggled through grad school . . . a lot. I even wrote a popular online memoir called *The Ph.D. Grind* that documented my turbulent journey and concluded with my ultimate decision to "retire" from academia.

In mid-2012, I finished my Ph.D. and began working as a software engineer at Google. Less than six months into that job, an incredibly lucky set of conditions arose that boosted my chances of getting a faculty position, which was something that appealed to me but always seemed outside my reach:

- At Google, I worked on software tools for online education, which was an emerging "hot" topic in the academic research community given the recent surge of MOOCs (massive open online courses).
- Working in industry—even briefly—made me see that academia was the best place at the moment to realize my career ambitions. Armed with this newfound clarity about my goals, I could tell a compelling and personal story about why I now wanted to become a professor.
- However, I hadn't been out of academia long enough for my C.V. to grow "stale." If I had remained as an engineer for another year, then my C.V. would no longer look as competitive for faculty jobs.
- A few of my friends had just started new jobs as assistant professors, so they were able to give me good advice about the application process.
- *The Ph.D. Grind* attracted the interest of some professors, which helped me get a few interviews.
- Most importantly, the U.S. economy began picking up again after the 2008 crash. Thus, far more computer science departments were hiring this year than they had been in the previous few years.

These conditions didn't exist a year earlier when I was finishing my Ph.D., and would likely become less favorable if I waited until next year. Thus, in mid-November 2012, I decided to seize this rare opportunity to apply for tenure-track assistant professor positions. My peers had been preparing for months for these all-important applications; I had only *five weeks* until the deadline for most schools.

2 Applying

In the Fall 2012 application season, I applied to 24 tenure-track faculty positions in computer science, split evenly among 6 top-tier computer science departments, 6 other private (non top-tier) research universities, 6 (non top-tier) public research universities, and 6 primarily undergraduate institutions.

I crafted a different teaching-focused application for the 6 primarily undergraduate institutions. However, since I eventually decided that I wanted to work at a research university, this section describes only my research university applications.

Several hundred people apply for each available tenure-track faculty position. The faculty hiring committee narrows down the applicant pool to two to five finalists and invites each of them to a day-long (or sometimes two-day) on-campus interview. The sole purpose of your job application is to get you an interview. Once you arrive on campus, your live performance on the spot is all that matters.

To maximize my chances of getting interviews, I applied mostly to departments with openings in my research subfields (human-computer interaction and software engineering) and those where I had personal faculty contacts. My personal contacts within a department ranged from direct (e.g., a professor I know works there) to indirect ones (e.g., one of my former collaborators or mentors knows a professor there). I had contacts at 18 of the 24 schools (75%) where I applied, most of whom were indirect.

Recommendation letters were vital in getting me interviews, but their quality was out of my control, so I didn't worry about them. All I could do was give my letter writers enough lead time and raw materials. Then I focused all of my efforts on the four components that were within my control:

2.1 Curriculum Vitae

Your C.V. (*Curriculum Vitae*) might be the first part of your application that the hiring committee reads, since it's easy to skim. If your C.V. looks unprofessional or flimsy at first glance, then your application will probably get thrown out right away. So spend a lot of time polishing it!

My C.V. was the first part of my application that I worked on. I liked starting here because the C.V. organized all of my academic accomplishments in one place and helped me frame my research story.

My C.V. ended up being six pages, which seems like the proper length for a serious job candidate who recently finished a Ph.D. in computer science. If your C.V. is shorter than four pages, then it risks looking too "lightweight" to be taken seriously. However, don't inflate your C.V. with fluff, since that looks even more lame. And don't worry if your C.V. isn't at the superstar level; you can compensate by getting strong recommendation letters from respected professors who know your work well.

Here are the sections of my C.V., listed in order: Research Interests, Education, Employment (both academic and industry positions), Teaching, Student Advising, Refereed Publications, Invited Book Chapters, Talks, Awards and Honors, Professional Service (e.g., paper reviewing and program committee work), Personal (e.g., my personal website and *The Ph.D. Grind*), References (letter writer contact info).

In retrospect, perhaps I should have swapped the order of "Awards and Honors" and "Teaching" to emphasize the former. But I was pretty happy with the overall format.

2.2 Research Statement

My research statement was four (single-spaced, 12-point font, 1.25-inch margin) pages, which seems standard for my field. The first 1.5 pages described my prior work, the next 1.5 pages presented my future research agenda, and the final page was a bibliography listing mostly my own papers.

I struggled a lot when writing my research statement because my future research agenda was very different from my prior work. I couldn't find a way to make the transition cohesive and compelling. In contrast, when reading several other colleagues' statements, I noticed that their future research agendas flowed quite naturally from prior work.

I don't think my research statement was very strong. A faculty contact I respected at a school that ended up not interviewing me even told me that my statement was a bit bland and not sufficiently

ambitious. I felt that what got me interviews was a combination of my C.V., recommendation letters, and the fact that I had personal contacts at most of the schools (8 of 10) that invited me for interviews.

2.3 Teaching Statement

My teaching statement was two pages, which also seems standard for my field. I felt like I did a good job presenting my diverse teaching experiences, lessons learned, and teaching philosophy; I demonstrated that teaching wasn't just an afterthought. But in reality, the teaching statement doesn't matter much for research-focused universities, so don't stress out if you have no stellar teaching stories to tell.

In the final half page of my statement, I listed a set of courses that I would like to teach or create, and specifically why I was enthusiastic about each one. It's a good idea to include this information here since some faculty at your interviews will likely ask you what courses you want to teach or create.

2.4 Cover Letters

Before writing the one-page cover letter for each school, I usually spent up to an hour browsing the department's website and reading individual faculty profiles to get a feel for how to customize my letter. Then I wrote a custom opening paragraph describing particular aspects of the department that I was genuinely excited about and conveying why I would be a great fit there. The remaining paragraphs were more or less identical across all schools. Colleagues advised me never to exceed one page of writing here.

If I had personal contacts at a certain school or other faculty I might want to collaborate with there, I worked them into my cover letter and highlighted their names **in bold**.

I also briefly described my unconventional Ph.D. journey, which led me to write *The Ph.D. Grind*. This extra personal touch might have made me a bit more memorable as the committee skimmed through hundreds of nearly identical letters.

3 Waiting

I submitted most of my applications by mid-December 2012 and started receiving my first interview invitations in mid-January 2013. Here is what I did during my month of waiting.

3.1 Agonizing

Throughout the month, I heard disheartening stories from friends who had applied for computer science faculty positions in the past few years and gotten zero interviews, or very few interviews and no offers. Their C.V.s looked similar to (or better than) mine, and they also had recommendation letters from well-known professors. To add to my anxiety, I felt woefully inadequate when comparing my own C.V. to the **monstrously** long C.V.s of the top candidates on the market this year. Everybody told me that I shouldn't compare myself to others, but I couldn't avoid doing so. For most of my month of waiting, I feared that I would get completely shut out and receive no interviews.

If you're applying to jobs and find yourself agonizing like I did, recognize that your feelings are normal but don't fret too much. There will always be someone better qualified than you on paper (unless you're the top candidate of the year!) and a great deal of luck involved in who ends up getting interviews.

3.2 Reading

To keep my mind fresh, I read a few dozen papers and several dissertations on topics that I mentioned in my research statement. I wanted to get up to speed on the latest related work and figured that even if I don't get interviews, this sort of learning would be fun and low stress. It turned out that this broad set of reading helped a lot during my interviews: I could readily point to related work during one-on-one discussions and when the audience asked questions at my job talk (see Section 5.3 for details).

3.3 Emailing Personal Contacts

After I submitted my applications, the only remaining thing I could do to improve my chances was emailing personal contacts I had at each school. I created a simple website containing my application materials and sent the link, along with a polite message, to all of my faculty contacts.

I had a few direct contacts at schools where I applied, but most of my contacts were indirect (e.g., colleagues-of-colleagues). For instance, my internship supervisor from Microsoft Research forwarded along my application materials to his friends at one school; and my various undergrad and master's project supervisors from MIT put in a good word for me at some other schools. I don't know how much these referrals ended up helping, but I was grateful that my mentors were willing to endorse me.

3.4 Receiving Interview Invitations

I was thrilled to receive 10 on-campus interview invites (out of the 24 schools where I applied). Most invitations came between mid-January and mid-February of 2013. Two schools first performed a 30-minute phone interview in Jan/Feb and then invited me to an on-campus interview after I had passed.

It was wise for me to apply broadly: I ended up not getting any interviews from the 6 top-tier schools to which I applied. This outcome didn't surprise me since I wasn't a well-known superstar candidate.

For the remaining (non top-tier) schools, personal contacts mattered a lot! Of the 12 non top-tier schools where I had a personal contact, I got interviews at 8 of them (67%). And of the 6 schools where I had no personal contacts, I got interviews at only 2 (33%).

3.5 Scheduling Interviews

It's impossible to optimally schedule your interviews. Convey your preferences but don't be too pushy, since faculty are much busier than you are. Some scheduling tips:

- Try to schedule your top choice schools early. If a school has multiple openings and their faculty *love* you, then they might make you an offer even before they finish interviewing the remaining candidates. If you get an early offer, you want it to be from a school that you like, since you might need to decide on it before finishing your remaining interviews. If your interview is late in the season, then they might be less likely to give you an immediate offer. However, not all schools give early offers, so don't flip out if your top choices are scheduled late. If a school waits until interviewing all candidates before making an offer, then being one of the final interviewees might be better since the impression you make is fresher on people's minds when they decide on an offer. But . . . the faculty might already be tired from interviewing so many candidates that they don't consider you as seriously. Bottom line: So much is out of your control, so just do your best!
- Don't schedule a top choice as your first interview, since you'll inevitably screw up something on your first attempt. I wasn't able to follow this advice due to scheduling constraints. My first interview ended up being at a school I liked a lot, so I was extra nervous about not screwing it up. Fortunately, I did well enough for them to give me an offer, which they graciously held open throughout the rest of my interview season.
- Try not to schedule more than one interview per week. If you have no choice, then spread them out as much as you can. You'll be dead-tired after each interview (if you're trying hard enough!), so traveling the next day can wipe you out even more and increase your risk of getting sick.
- Book direct flights whenever possible to minimize the chance of delays. If you can't get a direct flight, then try to connect at cities that are less likely to get hit by winter snowstorms. My worst nightmare is missing a connecting flight and then needing to sleep overnight at the airport.
- Try to get on the earliest possible flight of the day. That way, if you miss your flight, especially at a connection, you have more same-day backup options. It's okay if you're tired on travel days; you'll sleep well before your interview!
- However, if you're flying between two back-to-back interviews, then try to take a mid-day or afternoon flight so that you don't need to wake up early the morning after an interview. Getting a great night's sleep after each interview helped my mind and body recover.
- If you're taking a long cross-country or international flight, ask the school to book you an extra night at the hotel so that you can arrive at least two days before your interview. This will give you time to rest up and get rid of jet lag.

My main travel tip is to pack one full job interview outfit in your backpack. I put my folded clothes into a packing folder (search online for “Eagle Creek Pack-It Folder”) and slipped that into my backpack along with my laptop, iPad, and toiletries. I wore my dress shoes and coat on the plane. That way, even if my luggage got lost, I would still have an entire interview outfit.

You might think that you’re safe by putting your interview outfits into a carry-on roller bag. However, if you’re flying in smaller planes, the flight attendants often force you to “gate-check” your bag due to lack of space in the overhead bins. But you can always keep your backpack with you.

4 Preparing for Interviews

I started seriously preparing for interviews after receiving my first invitation in mid-January. I had only three weeks before that interview, so I focused intensely on my job talk and talking points document.

4.1 Job Talk Preparation

As soon as I received my first interview invite, I immediately scheduled three practice job talks—one per week—with trusted colleagues and friends. And then I got to work on creating the first draft of my PowerPoint presentation slides using my Ph.D. defense slides as a basis.

My first practice talk was a mess, but I could feel drastic improvements after each round of feedback and accompanying revisions. After the third major revision, I felt pretty confident about it. There’s simply no substitute for practicing in front of critical yet supportive crowds who are willing to show you “tough love”—smacking you down with constructive critiques and then encouraging you to emerge stronger as a result.

In addition to practicing three times in front of audiences, I practiced the talk by myself around a dozen more times before my first interview. Before each subsequent interview, I usually practiced the first five minutes and the final ten minutes in my hotel room so that I could keep the beginning and ending sharp. However, I found it too tedious to do full practice runs before all of my interviews; I didn’t want to risk getting bored with my own talk.

4.2 Talking Points Document

Besides refining my job talk, the other main way I prepared for interviews was by curating a 12-page document of *talking points*—prepared responses to questions that interviewers would likely ask me.

I scoured online advice guides for lists of common interview questions and also came up with a few that were specific to my circumstances. I wrote down each question along with a short reply in the document. Here are some example questions:

- I missed your job talk; what was it about?
- Why do you want to leave Google to become a professor?
- Why can’t you do what you want in industry instead?
- How do you plan on funding your research?
- What’s your secret weapon in terms of research?
- What makes your Ph.D. career unique?
- What were the main contributions of your Ph.D. dissertation?
- What motivated you to choose your Ph.D. dissertation topic?
- What was the biggest insight in your dissertation work?
- What were the main challenges or hard parts in your dissertation work?
- What makes your dissertation more than merely a collection of tools built for specific audiences? Where’s the scientific “beef” in it?
- Why should anyone care about your dissertation work?
- Why are you now switching your research focus to educational technology?
- What is the scope of your interests in educational technology?

- What research programs within the department will you create or strengthen?
- What does HCI (Human-Computer Interaction) research mean to you?
- What type of research environment would be your ideal in a department?
- How will you mentor Ph.D. students?
- How will you mentor undergraduate students?
- What type of research group do you envision forming?
- What's the first student project that you can supervise?
- Why is your field important and where is it going?
- What do you see yourself doing in the next 5 years, and why?
- What do you see yourself doing in 10 years, and why?
- Why should anyone care about your future research agenda?
- How do you plan on evaluating and validating your future research?
- What classes would you *love* to teach?
- What classes will you be able to teach with little preparation?
- What classes will you be able to teach with a bit more preparation?
- What new classes will you be able to create?
- What's your overall teaching philosophy?
- What's your favorite thing about teaching?

Although people didn't end up asking most of the questions on this list, it was still valuable to think through and write out my answers rather than just having a fuzzy notion in my head.

After each major revision, I printed out this document and packed it into my backpack. The night before each interview, I would re-read it in my hotel room to get myself back into the "interview mode" groove. I didn't memorize the text or pull out the document during meetings, since that would be awkward. I just wanted to refresh my memory before starting each interview.

Whenever any professor asked questions I didn't anticipate, I would make a note and later add my responses to the talking points document. I would also adjust my written answers based on how well they were received or on new information I learned throughout my interviews.

5 Interviewing: The Main Event

Your application, combined with a lot of good luck, gets you an interview. The interview—plus more luck—gets you a job.

Throughout an intense six weeks in February and March 2013, I traveled across the United States to eight on-campus job interviews. (I turned down my last two invitations due to lack of time and energy.)

This section presents observations from my seven interviews for assistant professor positions at U.S. research universities. I also interviewed at one primarily-undergraduate institution. During that interview, I realized that at this stage of my career, I didn't want to devote the majority of my time to teaching. Still, it was valuable to learn about the interesting challenges and rewards of that type of job.

5.1 General Advice

The main piece of advice I would give to any faculty job candidate is: *Strive to engage, not to impress.*

Throughout your interview, act like an assistant professor who is genuinely interested in engaging with colleagues about research, teaching, and academic mentoring. Don't act like an insecure and overeager kid (i.e., grad student) who is trying to impress a bunch of professors with your so-called accomplishments. Unless you're an absolute superstar, every single faculty member who is interviewing you has more research publications than you, has raised more grant money than you, has done more service work than you, and has more teaching experience than you. Trying to impress them is futile.

The faculty want to gauge whether you would fit in as a potential colleague in their department. In other words, would they enjoy having you around . . . potentially for life? Once I began empathizing with the faculty's perspective, my initial nervousness melted away, and I started having fun at my interviews.

5.2 Initial Surprises

The first aspect of interviewing that surprised me was how almost everyone was *extremely nice* to me. With a few rare exceptions, I never felt like I was being grilled, interrogated, sized up, antagonized, or otherwise unfairly judged in any way. Most faculty I met with were on their best behavior.

The reason for such cordiality became clear in retrospect: If a school liked me enough to make me an offer, they wanted to make sure that I also liked them a lot, so that I would likely accept. And even if they didn't make me an offer, they still wanted me to leave with a positive impression.

I have no clue how well other faculty job candidates were treated by their interviewers. I suspect that interviewer behavior varies a lot by field, school reputation, and reactions to the unique personalities of each candidate. Maybe I just lucked out or was blissfully unaware of the scrutiny I was under.

5.3 The Job Talk: Your One-Hour Audition

The job talk is the most important component of your interview. If the interview is the main event, then the job talk is the *main* main event.

Your job talk is your one-hour audition for the role of a professor. Think of it like a music or acting audition, except here professors are your judges. By the end of your hour on stage, you need to get the professors in the audience so excited about the research you've done, so inspired by your future research vision, and so energized by watching your performance that they will be proud to call you a colleague.

This hour is often the first and *only* impression that many professors in the hiring department have of you, since many of them did not read your application materials and will not be meeting with you one-on-one. Thus, if you deliver an amazing job talk, then you have a fighting chance at an offer. But if your talk is mediocre, then many of the faculty will have already made up their mind not to give you an offer, and all subsequent meetings will just be polite formalities. As my friend eloquently told me while I was preparing for interviews, "Don't screw up your job talk; people will get really mad."

The first way to screw up is to exceed the time limit. People hate (hate, *hate!*) talks that run long. You might have a 75-minute slot at some schools and only a 50-minute slot at others. To be safe, your talk should take at most 45 minutes without interruptions. And you need to keep an eye on the clock so that questions from the audience don't eat up too much of your time. But you don't want to brush off questions, either. It's a delicate on-stage balancing act, which is impressive when done well.

The second way to screw up is to make your talk too dense and inaccessible to everyone except for experts in your own subfield. Rather, the target audience should be the majority of professors in the audience who probably know and care very little about your subfield. Teach them something interesting, and make them care! If a professor doesn't understand and get excited by your talk, then they aren't going to vouch for you when it comes time to vote on who gets an offer.

Now that you know what to avoid, let's discuss what makes a good job talk. There is a lot of advice online (see list of references on the last page), so I'll try not to repeat what others have already written. In particular, I really liked *Perfecting The Job Talk* by John Eadie [1]. Also, like Matt Might [4], I highly recommend reading *Even a Geek Can Speak* by Joey Asher. Although this book is mainly for corporate talks (i.e., "pitching to suits"), I still managed to transfer many of the tips into my academic presentations.

In short, your job talk needs to show that

1. you have done **solid research** in the past,
2. you have a **compelling vision** for future work,
3. and you are a **charismatic individual** whom the department would be proud to show off.

I've ranked these requirements in increasing order of importance. Let's discuss each in turn:

5.3.1 Solid past research

Like any technical talk, you will spend the majority of your time presenting past research. The common wisdom is that you should start with the high-level motivation and then dive deep into one or two of your strongest projects, tied together by a common theme. I actually presented three projects since my third project transitioned well into future work, but I spent less time talking about that final one.

Even though your past research takes the most time to present, the specifics aren't too important as long as your technical content is strong. The department wouldn't have invited you to interview if they didn't respect your past research, so you don't need to "defend" its legitimacy like you would at, say, your Ph.D. quals or defense.

5.3.2 Compelling future vision

You should spend the final 10 minutes of your talk on future work. This part is, paradoxically, much more important than the 35 preceding minutes that you spent on past research. Huh?

The department isn't hiring you based on your past research. They're more interested in what new ground you might break in the future. The *worst possible* future work is simply extending your dissertation in incremental ways. Think far bigger! Pitch ideas that you don't yet know how to realize.

One hyperbolic way to plan your job talk is to design your first 35 minutes as a warm-up for the final 10 minutes of future work. I wouldn't wholeheartedly endorse this strategy, but it's food for thought.

5.3.3 Charismatic individual

The most important property of your job talk isn't what you say, it's *how you say it*. I know this sounds cheesy, but bear with me. The host department wants to hire a person, not a portfolio of research. Thus, your job talk is a one-hour live audition for *yourself*, not for your prior research.

The faculty want someone whom they would be proud to show off—an energetic and charismatic individual who can win prestigious grants, do research that leads to notable publications, serve as an inspiring teacher, mentor, and future leader, and bring greater visibility to their department and school. Your goal is to convince them that you're that person . . . by delivering a 45-minute technical talk. Huh?

Think about it this way: An auditioning singer isn't judged on what song they sing, but rather on *how* they sing it; and an auditioning actor isn't judged on what lines they say, but rather on *how* they say it. By that same token, the technical content of your job talk serves as a vehicle for conveying your intellectual personality.

First, being an excellent public speaker is a prerequisite for on-stage charisma. If you're not already an excellent speaker, learn now! The time you invest will pay big dividends throughout your career. Nobody ever said, "Wow, I would've liked that talk more if the speaker weren't so poised and eloquent."

After you become an excellent public speaker, focus on empathy. Start with a genuine desire to connect and to help the audience understand your message. Don't just talk *to* them; connect *with* them. Don't rattle off a memorized speech like a well-rehearsed robot; inject your own personality throughout the talk to show that you can communicate like a real human being, not just as a talking research paper. The best academic speakers I've seen look like they're enthusiastically telling a fun story about their research to a group of friends, not like they're being judged by a panel of professors during an oral exam.

The final way to demonstrate charisma at your job talk is by gracefully handling interruptions and questions. Do you make your questioners feel respected, important, and intelligent? Or do you get all flustered, offended, and break down when challenged? How you field questions is a proxy for how you might deal with (potentially crabby) students and colleagues in the future.

When someone asks you a question, pay close attention and don't interrupt. The entire audience is staring at you as you listen to the question, so don't look annoyed, frazzled, grimace-faced, huffy, or nervous with closed body posture. Your questioner wants to learn more about your research, not to grill you. Even if they are firing up the grill on purpose, just pretend that they're genuinely curious. If you react defensively, then the audience will subconsciously pick up on your negative body language.

5.3.4 My job talk postmortem

The two most successful parts of my job talk were the first five minutes and the final ten minutes.

I opened my talk with a five-minute anecdote about a scientist friend who was struggling with research programming and data management issues. This "hook" provided the motivation for the three research

projects I then presented, each of which addressed one component of my friend’s struggles. Many faculty loved this memorable anecdote and later told me at one-on-one meetings how they related to my friend’s struggles in their own daily work.

I spent the final ten minutes presenting ideas for future work, which ended up being far more compelling than what I wrote in my semi-lame research statement (Section 2.2). My energy level built up throughout the talk and reached its climax at the end rather than petering out like, “I’m just gonna continue my dissertation work, uh-hh, okay, here’s my concluding slide, bye.” My future research vision incited a lot of discussion afterward. Professors were eager to chime in with their suggestions and healthy skepticism during subsequent meetings, which I interpreted as a marker of success.

On the flip side, the most common criticism of my job talk was that it was too “soft” and lacking in technical depth. Faculty job candidates are often advised to include ten minutes of dense technical content in the middle of their presentation that almost nobody understands, mainly to show that they’re doing “hardcore” work. I purposely didn’t follow that advice since I wanted to make my talk accessible to everyone in the audience. The benefit of my decision was that it was easy to understand the talk’s contents and to follow the story that I crafted about my research. The main drawback was that some faculty thought I was too “soft.” During a one-on-one meeting, a senior professor mentioned my job talk and asked me, “So, where’s the beef?” I fumbled a bit on the spot but then came up with a decent answer that I later added to my talking points document (see Section 4.2).

After several interviews, I made minor adjustments to my slides to clarify minor points. However, I avoided making major changes since I didn’t want to lose the “muscle memory” gained from extensive prior practice. It’s impossible to satisfy everybody with any given talk, and each audience will nitpick different parts. Thus, constantly tweaking your talk will do more harm than good.

In the end, I was very happy with my job talk. But after giving the same talk eight times, I was even happier about never having to give it again!

5.4 Faculty Meetings

The majority of each interview consisted of 30-minute one-on-one meetings with faculty. At my shortest interview, I met with 10 faculty; at my longest, I met with 20 faculty over a two-day period.

What initially surprised me about these meetings was how unstructured they were. I expected each professor to fire off a list of prepared “interview questions,” take notes on my responses, and then somehow “grade” my performance afterward. However, most simply wanted to have a casual chat as though we were colleagues and to answer any questions I had about their department.

My one piece of advice for these one-on-one meetings is: *Be a great listener*. It’s that simple.

Most professors just want to get a sense of who you are as a person and whether you’d fit in as a colleague. They’re not looking to grill you about technical minutiae (but they *are* still judging you [6]). Your goal is to develop genuine rapport during your 30-minute meeting; I think the best way to do so is to listen well. I spent the bulk of most meetings with faculty listening to and talking about *their* research, not mine. At first, I was concerned that I didn’t convey enough information about my own work; but I later realized that we actually connected, albeit over their research rather than mine. When you leave a professor’s office, they will have formed a gut feeling about you [6], which they will later report to the hiring committee. If they have a positive impression of you, then your meeting succeeded.

You’ll inevitably encounter a few hyper-critical professors who challenge parts of your job talk, approaches you took in your research, or even the validity of your entire subfield. No matter what, don’t come in expecting a grilling. If you do, then your body language will become closed and defensive, and you’ll emanate an off-putting vibe. If people ask you tough questions, treat it as a sign that they’re genuinely interested in your research, not trying to tear you down. As long as you’re comfortable with your talking points document (see Section 4.2), you’ll be fine. Even if someone *is* trying to tear you down, pretending that they’re not will make your body language and responses more agreeable and might even disarm their antagonism. The last thing you want is an argument to erupt, ending in thrown chairs and flipped tables¹.

5.5 Department Chair Meeting

The one-on-one meeting with the department chair (sometimes called the “department head”) is one of your most important faculty meetings. Whereas other faculty often just want to make sure you’re

¹unless you’re interviewing with Vince McMahon

not a clown, the chair has a vested interest in how you will complement and grow the strengths of the department. Even better, they want to be the chair who presided over the hiring of a future superstar.

Let them lead the meeting, and be an attentive listener. Try to understand their future vision for the department and mention how that connects with your own research, teaching, and outreach interests.

5.6 Dean Meeting

At most interviews, I usually had a 45-minute meeting with the Dean of Engineering (or whichever school houses the computer science department). I was nervous during my first dean meeting since I didn't know what to expect. However, I soon realized there's no reason to be nervous since the dean probably isn't involved in hiring decisions. Don't act like a bozo, and you'll be fine.

The dean basically gives a sales pitch about why their school is great. If you're curious, you can ask questions about tenure criteria, fundraising expectations, or incentives for collaboration. I personally didn't get much out of these meetings, since they were mostly just polite chit-chat. One memorable exception was a dean who actually read my C.V. and personal website and then engaged me about my personal backstory. He challenged me to think hard about what kind of leader I want to become in ten years. Our conversation made me reflect more on my research vision and goals, which was really cool!

5.7 Grad Student Meeting

At most interviews, I usually had 30 to 45 minutes to meet with grad students. At some schools, as few as four students showed up to these sessions; at others, over a dozen or even two dozen showed up. A few schools didn't schedule time for me to meet with grad students. Those were usually places where I sensed that the faculty didn't feel as proud of the grad students in their own department—a bad sign!

Sometimes students were reluctant to speak up, so I had to take the lead to avoid awkward silences. I've heard you're supposed to ask grad students candid questions to get the “real scoop” on their department, not the sugar-coated sales pitch from faculty. I didn't care much for department gossip; instead, I used my time to engage the students in their research, career goals, and other interests. I was in their position less than a year ago struggling to finish my Ph.D., so I could empathize well with them.

Some people at the session will be grad student representatives on the hiring committee, so they will ask you prepared questions such as:

- What undergrad courses are you passionate about teaching, and why?
- What graduate courses are you passionate about teaching, and why?
- What kind of advisor would you be to your own future grad students?

Think carefully about these questions, especially the last one, so that you can give meaningful answers.

At the end of each session, I always made myself available to video chat one-on-one with anyone who had private questions. Throughout my interview season, I ended up video chatting with grad students at a few schools about their research projects and career goals. Obviously these conversations had no bearing on hiring decisions, but I thought it was important to be a good academic citizen and informal mentor to students I met. After all, that's part of a professor's job, so I might as well start doing it now!

Finally, I've heard secondhand stories of faculty candidates being rude or dismissive to grad students at these meetings. What kind of idiot would do that?!? Seems like such an amateur mistake. Grad students are the lifeblood of research universities; without them, no junior faculty would ever get tenure.

5.8 Mealtime Conversations

At all of my interviews, faculty took me out to breakfast, lunch, and dinner. Breakfast and lunch were usually quick and casual, since my hosts didn't want me to be late to my bazillion meetings.

Dinner is where things got serious. When I was at my most vulnerable after a full day of nonstop meetings, that's when the faculty grilled me like a fish! No, just kidding. Everyone was really nice to me at dinner, and I never felt like I was being interrogated. At most, professors asked about my future research agenda, where I planned to get grants, and my thoughts on current events in our field such as online education and the increasing role of programming in scientific research.

I sensed that my dinner hosts just wanted to get to know me better as a person and potential colleague, so being myself was fine. However, since I was often ridiculously tired and worn down after a

full day of interviewing, I had to try extra hard to muster up enough energy to be attentive and engaging at dinner. That effort was well worth it; I could always collapse in my hotel room afterward.

Don't let the chill vibe deceive you, though; meals are still part of your interview. This isn't a night out with your buddies, so don't act glib or unprofessional in any way. And **never** gossip about other schools or job candidates. Throughout my interviews, I chose not to order alcohol at dinner (much less at breakfast or lunch!), but it's fine to have a drink if others are drinking too. Just don't be a bozo.

Finally, an effective way to signal your interest in a school is to ask what your dinnertime hosts love about the surrounding area. For example, ask about how the area could support your hobbies. If you're married and/or have kids, ask about things that your spouse or kids would like. On the other hand, if you show no interest in the area, then the faculty will suspect that you're not serious about their school.

5.9 Taking Notes

I always brought a small notepad with me to take notes during one-on-one meetings and sometimes during meals. However, after my first few meetings, I realized that it was impossible to take good notes while staying engaged with my conversation partner(s).

Since engagement was far more important than note-taking, I kept my notepad closed most of the time and only opened it to scribble down key phrases that I might later forget. A side benefit of focusing hard on the conversation itself is that I could remember lots of details even without any notes.

Each night in my hotel room, I would type up detailed notes on my laptop by replaying all of the day's meetings in my head and using the notepad scribbles to jog my memory. Besides documenting individual meetings, I also typed up my gut feelings about the current school and a list of pros and cons, usually compared against other schools I already visited. Then when I woke up the next morning, I would revisit and revise my typed-up notes after letting my first impressions sink in overnight.

I highly recommend this minimalist note-taking strategy. Faculty want to engage with you as a potential colleague, not as a jittery grad student who frantically scribbles down every phrase they utter. Also, excessive note-taking can be off-putting to some people, since they feel like everything they say is somehow "on the record." During my meeting with one professor, he told me how he screwed up his first job interview by focusing too much on taking notes rather than engaging with his interviewers, who later told him that they might have made him an offer if he had developed better rapport during meetings.

5.10 Follow-Up Emails

The day after each interview, I spent a lot of time crafting personalized follow-up emails. For schools that really caught my interest, I sent an email to every professor I talked to, usually following up on the specifics we discussed during our meeting. Writing a dozen or even two dozen emails takes a lot of energy, especially since I was always so tired after each interview; but I felt like this extra effort was worthwhile. For schools that didn't interest me as much, I sent follow-up emails only to a few people such as the department chair, hiring committee chair, and my faculty host.

I recommend writing follow-up emails that are sincere, personal, and not too long. And make sure your emails don't read like cookie-cutter form letters; write like a real human being.

5.11 Being A Great Communicator

After eight grueling interviews, I've concluded that being a *great communicator*—truly empathizing and connecting with others—is by far the most important trait for a faculty candidate. After all, most of what a professor does at work is communicate: meeting with potential collaborators and funders, writing grant proposals and technical papers, advising students and postdocs, teaching, reviewing papers, performing committee service work, and giving technical talks. Thus, since all interview candidates are technically qualified for the job, I suspect that the best communicator likely gets the offer.

6 Receiving Offers

The offer process reminded me of how teenagers ask one another to high school dances. Here, the hiring committee chair from each school is the "asker" and the job candidate is the person being asked.

Just like high school dance asking rituals, there is an inherent asymmetry: Each school can extend only one offer at a time for a given hiring slot, but each candidate can get offers from multiple schools.

Each school's hiring committee wants to maximize the chances that their pick says "yes," so they want to extend an offer to the best candidate who also seems interested (i.e., not "out of their league"). They also want the chosen candidate to decide quickly, so that they have time to make an offer to their second choice if their first choice rejects them. If the first choice delays too long, then the second choice might already be scooped up by another school, and they are left without a date to the dance.

As a candidate, you want to go to the dance with the best possible date. You're usually ecstatic to receive your first offer, but you also want to hold out for potentially better offers down the line. The most awkward position is when you have one offer that you're lukewarm about, but they want your decision ASAP. Do you risk not having a date to the dance, or going with someone you're not that into?

Bottom line: If you want a school to make you an offer, you need to demonstrate both high value (i.e., you're their best candidate) and high interest (i.e., you really want them to ask you to the dance). You can demonstrate interest both during your interview and afterwards via enthusiastic follow-up emails. If you're a finalist, sometimes the hiring committee chair will call you to gauge your level of interest. Be honest; if you're no longer interested, let them know so that they can make an offer to another deserving candidate. And other times, despite your best efforts, the hiring committee is just not that into you, so don't take the rejection personally.

6.1 Multiple Offers

If you're fortunate enough to receive multiple offers (or multiple schools gauging your interest in an offer), then it's time to pull out your list of pros and cons about each school and start comparing them. Here are some factors that mattered to me as I weighed multiple offers:

- How enthusiastic were the faculty about your offer? Was the approval vote unanimous, or was it a bitterly-fought Pyrrhic victory? Did any faculty personally reach out to you afterward?
- How nice were the faculty to you during your interview? That is, how gracious were they even before deciding to give you an offer? See Section 5.2 for details.
- Are there other faculty in your subfield at that school? Are they supportive of your offer, or do they view you as competition?
- How enthusiastic are the faculty (and maybe the dean) about your particular subfield?
- How bad are the departmental politics and bickering? Junior faculty can often give you the inside scoop on this issue, while senior faculty have more of a vested interest in painting a rosy picture.
- Are there senior faculty at that school who can serve as good mentors, even if they work in a different subfield? Good mentors can sometimes be more important than good students.
- How good are the Ph.D. students? How much does it cost to fund each student for a year? Does the department provide partial financial support for students? Weigh potential quality against cost: Given two schools with comparable student quality, prefer the one where students cost less.
- How much do the faculty respect their own Ph.D. students? Do they ever talk down to students?
- How close is the school to the nearest real airport? As a professor, you will be traveling a lot for work, so being close to an airport makes your life much easier.
- How much would you (and your family) like living where the school is located? For me, this factor ended up being one of the most crucial.

When you're weighing offers, as soon as you're no longer interested in a school, let them know. This gives the hiring committee time to make an offer to their second choice candidate. They will be disappointed but appreciative that you were up-front rather than stalling and leading them on.

6.2 Negotiations

Now it's time to bring out the big guns. Buy every single high-powered corporate negotiation book you can find, master their buzzwords and tactics, and then squeeze the schools for everything they've got!

I hope you realize I'm kidding. In industry, especially at big companies, you're often negotiating with slick professional recruiters and HR department personnel who are used to these sorts of corporate games. But in academia, the people on the other end are your future colleagues, not anonymous suits. Gossip spreads fast, so you don't want to start your career with people in your field thinking that you're a money-grubbing mercenary.

Of course, you should still negotiate, but just be mindful of who is on the other end. Make your requests respectfully, and frame each in terms of how it will increase your chances of success as a junior professor. And don't waste people's time and political capital if you're not serious about their school.

If you get recruited by other schools as a senior candidate later in your career, then you will have much more negotiation power. But as a junior candidate, don't stress if you don't get much beyond your initial offer terms. There are many more important factors in deciding whether to accept a given job.

6.3 Second Visits

I narrowed down my offers to two final choices and then visited both schools with my wife during the first week of April 2013. As expected, second visits were much more relaxed than interviews. I didn't even need to dress up. And I could ask more candid questions during my meetings with faculty and grad students. In general, I tried to get a better sense of how well I would fit in within each department.

My wife and I had dinner with several faculty and their families, which was great for learning about work-life balance and academic family life. We also drove our rental car around the area surrounding each school, looked at potential houses to buy, ate at local restaurants, visited shopping malls and grocery stores, and got a feel for what it would be like to live there . . . maybe for the rest of our lives.

During your second visits, I recommend renting a car and driving around by yourself rather than just being driven around by your hosts. That way, you can see both the good and bad parts of town.

6.4 Decision and Follow-Up

A few days after my second visits, I decided to accept my offer at the University of Rochester. Although the computer science departments at my final two choices differed in many ways, I felt like I could've done good work and gotten the support of senior faculty at both schools. However, my wife and I preferred to live in the Rochester area, so that school won out in the end.

Immediately after deciding on Rochester, I called and emailed a few faculty at the other school to deliver the news and to express my gratitude for their offer. Throughout the subsequent weeks, I emailed all of the people who helped me throughout the past five months of job hunting (November 2012 to April 2013) to express my gratitude as well. I couldn't have gotten here without all of their help.

7 Reflecting

Throughout my intense six-week interview period, I talked with over a hundred computer science professors in diverse subfields across eight universities. It was a rare and incredibly educational experience.

7.1 A Preview of Faculty Life

Chatting with over a hundred professors gave me a detailed sense of what professors of all levels really do at work, what motivates them, and what troubles them. After finishing my interviews, I felt much more prepared to begin this job. Of course, I don't claim to be any sort of expert; but at least I'm now aware of my current limitations and what I can do to overcome them. Most notably, I have zero grant writing experience, so I need to work hard on the skills required to write successful grant proposals.

Also, I learned a ton by talking with junior faculty about the challenges they faced in their early years. After all, I will likely face those same challenges in the near future, so it's best to hear about potential pitfalls as soon as possible. To get these conversations rolling, I often asked, "Tell me what you did during your first year on the job . . ." or "What surprised you most about this job so far?" and then started taking notes.

7.2 The Business of Academia

The most practical pieces of knowledge I gained from talking with a hundred professors and almost a dozen deans were all related to the business of academia. Modern academia isn't an Ivory Tower where people just dream up cool ideas and pontificate while sipping cappuccinos; it's a business just like any other, where individuals and institutions need money to advance their own interests. The stakeholders here include funding agency directors and program managers, university administrators, deans, department chairs and heads, students, support staff, and professors of all levels of seniority.

As an assistant professor, you are part of this ecosystem and expected to perform a set of duties—grant fundraising, publishing, student advising, professional service, teaching—to earn tenure. And once you get tenure, it's not just chill time: You're expected to do even more work to maintain your privileged position. As one senior professor bluntly told me during our one-on-one meeting, “Tenure means nothing; if you don't continue pulling your weight on fundraising, we'll lower your salary, increase your teaching and administrative loads, and make your life so miserable that you'll wish you were back in industry!”²

I mention all of this not to sound cynical, but rather because I feel that only by acknowledging these realities can it become possible to focus on the creative and fulfilling work that attracted me to this job.

7.3 From Fear to Optimism

At the end of my first interview, I felt overwhelmed by all of the new skills that I would eventually need to master to succeed as a professor. I remember being filled with fear and self-doubt as I returned to my hotel room that night, since I had just learned about the many ways I could fail—not getting enough grant funding, not properly training and managing students, not publishing enough papers, and not earning the respect of senior colleagues. I was afraid not only that I had made a bad impression and screwed up my interview, but that even if I could get an offer, I wouldn't actually be able to do the job.

Fortunately, my optimism and confidence grew with each subsequent interview. The invigorating conversations I had with professors and grad students reminded me of my love for academic research. By the end of my eighth and final interview, it became clear that I *really* wanted to do this job, since my mind was overflowing with new research ideas that were more suitable for academia than industry.

At present (April 2013), I still have so much to learn about this job and no idea if I will make it, but I am immensely grateful for the opportunity to try.

Acknowledgments

Thanks to everyone who helped me throughout my job search, to Ben Golub for insightful comments on this document, and to Kevin Cockrell for inspiring some of the footnotes.

Biography

Philip Guo will start as an assistant professor of computer science at the University of Rochester in Fall 2014. Philip received a Ph.D. in Computer Science from Stanford University in 2012 and S.B. and M.Eng. degrees in Electrical Engineering and Computer Science from MIT in 2006, winning the annual EECS department master's thesis award. His current research passions span the areas of human-computer interaction, online education, learning technologies, and software engineering.

In addition to research, Philip loves creating software and writing online articles that impact hundreds of thousands of people. Over 200,000 people each year visit his personal website, <http://pgbovine.net/>. In 2012, he wrote *The Ph.D. Grind* (<http://pgbovine.net/PhD-memoir.htm>), a free e-book that is the first known detailed account of an entire Ph.D. experience; over 100,000 people have downloaded this e-book so far.

²Yeah, that was an awkward meeting ...

Appendix A: Detailed Timeline

[Update in November 2013] Several people have asked me about the faculty job search timeline, so I have documented mine here for reference. Note that most job candidates had far more preparation time than I did, since I decided to apply last-minute. Also note that I applied only to Computer Science departments in the United States, so timelines are probably different in other fields or countries.

November 2012

- Nov 3 – decided to apply to 2 primarily undergraduate institutions (PUIs) near where I lived (the San Francisco Bay Area) with only five weeks before application deadlines
- Nov 5 – emailed potential recommendation letter writers to ask whether they would be willing to write me a letter within the next five weeks; luckily they agreed, and it was on!
- Nov 12 – started working on my C.V.
- Nov 15 – decided to expand my job search to 6 PUIs around the U.S., since I was now willing to move out of the San Francisco Bay Area if I could get an offer
- Nov 15 – started writing my teaching statement first since I was focusing on PUIs
- Nov 16 – decided to expand my job search to Ph.D.-granting research universities and apply to 8 of those schools (mostly where I had personal contacts) in addition to the 6 PUIs
- Nov 22 – started writing separate research statements for PUIs and research universities
- Nov 25 – started writing cover letters for schools with early December deadlines
- Nov 27 – surprise informational phone call from the faculty search committee chair of a PUI (where I had a personal contact) to give me suggestions and advice to improve my application
- Nov 30 – submitted all 6 PUI job applications; switching focus to research university applications

December 2012

- Dec 1–7 – expanded my job search to 5 more research universities with recent public job postings, bringing the total up to 13 research universities plus 6 PUIs
- Dec 8 – submitted all 13 research university job applications online (most had a Dec 15 deadline)
- Dec 14 – confirmed that all of my applications and recommendation letters had been received, thus completing my application process; now the waiting and agonizing began (see Section 3.1)
- mid-December – sent a link to my job application materials to close colleagues (e.g., former advisors and mentors) and asked them to put in a good word for me wherever possible (see Section 3.3)
- Dec 20 – applied to another school on a whim since I saw on their job post website that they had a January 15, 2013 deadline
- Dec 24 – started brainstorming the outline for my job talk, even though I didn't know whether I would get any interviews yet
- Dec 27 – applied to another few schools that posted late job ads, thus bringing my total up to 22

January 2013

- Jan 5 – applied to one more school where I had a personal contact, bringing my total up to 23
- Jan 8 – did a second round of notifying colleagues about my job application materials, this time emailing a larger set of more distant contacts (see Section 3.3)
- Jan 10 – applied to one final school where I had a personal contact, bringing my total up to 24

- Jan 11 – received an invitation for a first-round phone interview; feeling excited that I got at least one preliminary interview, which meant that my application wasn't totally bogus!
- Jan 16 – received my first on-campus interview invitation (at a different school); more excited!
- Jan 17 – 30-minute phone (video chat) interview with the school that invited me on Jan 11
- Jan 18 – started preparing my job talk since I had at least one on-campus interview now
- Jan 22 – received two more on-campus interview invitations, bringing my total up to 3
- Jan 28 – received one more on-campus interview invitation, bringing my total up to 4
- Jan 29 – received one more on-campus interview invitation, bringing my total up to 5
- Jan 29 – received one additional phone interview invitation
- Jan 30 – received my first rejection notice (from a PUI) via email; note that most schools don't send rejection notices, so not receiving an interview invitation means that you've been rejected.

February 2013

- Feb 1 – received one more on-campus interview invitation (from the school where I did a phone interview on Jan 17), bringing my total up to 6 interviews; decided to quit my software engineering job at Google, since I didn't have enough vacation days to prepare and travel for interviews
- Feb 4 – 30-minute phone interview with the school that invited me on Jan 29
- Feb 5 – received one more on-campus interview invitation, bringing my total up to 7
- Feb 8 – received one more on-campus interview invitation, bringing my total up to 8
- Feb 10–12 – travel for my first on-campus interview
- Feb 14 – last day of work at Google; sad to leave my friends there on such short notice, but super-super-pumped for the next month of focusing solely on interviews!
- Feb 17–22 – travel for on-campus interviews 2 and 3 (together on one trip)
- Feb 18 – received one more on-campus interview invitation (from the school where I did a phone interview on Feb 4), bringing my total up to 9
- Feb 19 – faculty search committee chair from interview 1 called to ask about my interview timeline and priorities, which indicated interest on their part
- Feb 21 – search chair from interview 1 said that they would likely make me an offer
- Feb 25 – on-campus interview 4 (local in the San Francisco Bay Area, so no traveling)
- Feb 27 – received an offer from interview 1, about two weeks after that interview; my first job offer!
- Feb 28 – received one final on-campus interview invitation, bringing my total up to 10

March 2013

- Mar 3 – cancelled two of my interviews due to lack of energy, time, and the fact that I already had an offer from a place that I preferred over those two schools; now I was down to 8 total interviews
- Mar 5–7 – travel for on-campus interview 5
- Mar 12–22 – travel for on-campus interviews 6, 7, and 8; the University of Rochester was interview number 7; completely exhausted after my final interview and was rewarded by getting stranded overnight at the Denver airport due to a massive snowstorm!
- Mar 21 – email from the University of Rochester search chair saying that they were close to making me an offer, but a few more faculty wanted to chat with me; scheduled a call for Mar 26

- Mar 21 – received my second job offer (from interview 5), again about two weeks after my interview
- Mar 26 – video chatted with a few more faculty at the University of Rochester (who were out of town during my on-campus interview), and received a job offer that afternoon
- Mar 27 – turned down one of my offers, thus leaving me with two final choices to consider
- Mar 27 – emailed my main contact from interview 4 to update him on my plans to accept the offer at one of my final two choices, thus taking myself out of the running at his school
- Mar 28 – the search chair from interview 8 called to gauge my interest, and I told him that I was already narrowing down to two final offers and thus took myself out of the running there

April 2013

- Apr 1 – my contact from interview 6 emailed to check on my status, and I told him that I was already narrowing down to two final offers and thus took myself out of the running there
- Apr 1–3 – second visit to the University of Rochester and offer negotiations (see Section 6.3)
- Apr 4–6 – second visit to my other final choice school
- Apr 7 – accepted my offer at the University of Rochester
- Apr 10 – the search chair from interview 3 told me that I would most likely get an offer there since their top choice would most likely decline; but I had already decided on the University of Rochester by then, so I took myself out of the running there
- mid-April – wrote a TON of thank-you notes to everyone who helped me in the past few months
- Apr 16 – started writing this document (whoa, meta!)

Appendix B: Extra notes from 2015–2016 faculty job search

These notes from my second faculty job search are disorganized, unpolished, and somewhat redundant. But it's better for them to be posted here than to just sit there unread on my computer ...

also upload contents of these docs or link to them:

<http://pgbovine.net/comparing-academic-departments-for-faculty-jobs.htm>

<http://pgbovine.net/faculty-job-application-materials.htm>

<http://pgbovine.net/faculty-job-application-tips.htm>

<http://pgbovine.net/why-become-cs-prof.htm>

Feb 2016

job talk advice upon watching videos of my job talks at some schools ...

right now the main advice i have for myself regarding my job talk is NOT TO LINGER ON ANY SLIDE ... just click 'next' to move onto the next slide after the core content has been covered. DON'T LINGER.

- the definition of linger: "stay in a place longer than necessary, typically because of a reluctance to leave."
- i think that when i get nervous live, i linger and keep saying extra insights in an attempt to fill the air and avoid silence and transitions, but that lingering just adds up.
- another reason for lingering is that i think of new insights on-the-spot that would be interesting to share ... i get new flashes of insight while performing live. hopefully that will happen less as i get more practiced at giving this talk in future iterations.
- fortunately, i've managed to eliminate almost all instances of "meta-talk" where i talk about the talk itself, or the slides, or whatever. those are the most egregious violations, which i've gotten rid of almost completely.
- but now i need to work on getting rid of lingering and other improvisations. REMEMBER, PEOPLE WON'T MISS HEARING SOMETHING THAT THEY WEREN'T EXPECTING IN THE FIRST PLACE! JUST STICK TO WHAT'S ON THE SLIDE
- LISTENING to my UCSD job talk video again, i have a lot of nervous tics and MAKING ASIDES (ad-libbing) on the spot as some new thoughts come into my head as i give the talk. DON'T DO ASIDES. DON'T DO ASIDES!!! don't ad-lib!
- i also have a tendency to MUMBLE at the end of some of my sentences where the words sometimes trail off at the end; that doesn't appear crisp enough.
- keep it crisp, bam bam bam, click to the next slide before i have a chance to linger. and be OK with some momentary beats of silence.
- i also use more tentative words such as "-ish" like "100-ish" and "right?" and "so" as fillers when i'm nervous. and also going off on short-ish (!) rambling asides.
- i gotta keep it more crisp, more crisp, while at the same time not losing the conversational nature of my natural tone.
- ugh, also my posture is kinda bad -- i'm a bit slouchy and my hips are thrust forward instead of hips back and chest out. i don't care as much about posture since people are mostly looking at the screen at my slides; but i DO care about my vocal delivery, which wasn't the best.
- also, i have a tendency to mumble and peter out toward the second half of my talk, or just rush since i'm running low on time; i gotta keep up the enthusiasm level throughout the hour, even though the first 10 minutes are the most critical to hook the audience
- and i also have a tendency to sometimes stare backwards at my slides as projected on the screen behind me, which turns my back to the audience.

instead, i should trust the display on my laptop monitor and look at that, so that i can seamlessly look right up at the crowd instead of turning my back. but of course, it's important to shine the laser pointer (sparingly) at the actual projector screen instead of pointing it (or my finger) at my laptop screen.

- again, DON'T LINGER -- don't repeat the same phrase again in several different ways, either. just finish a point, CLICK THE DAMN CLICKER, and move onto the next point/slide! don't linger and rephrase.
- also, on a related note, don't say TOO MUCH before advancing to the next slide, if the next slide is basically gonna explain what you just said because you lingered on the prior slide and talked too much. then you're in an awkward position of simply repeating yourself. just CLICK and move on, don't hesitate and don't linger

Also, minimize my use of the laser pointer since that takes up valuable time and is somewhat distracting; my slides should be self-explanatory. Also, the laser doesn't show up on the video recording anyways. And it's more of a reason to inadvertently fidget around and exhibit nervous tics; moving pointers are often distracting on the screen if not done well. it's also an excuse to turn my back on the audience to face the screen, which is bad too.

Also, make larger arm motions and don't scrunch up my armpits ... don't go wild, but don't just gesture with my elbows and hold my armpits in either, since that makes me look too small. LARGE OPEN POSTURE! BIGGER ARM MOTIONS!

presentation mode checklist for laptop:

- all applications closed other than PowerPoint (to avoid surprise pop-ups)
- wireless Internet off
- sound off

<http://pgbovine.net/live-laptop-presentations.htm>

interviews are really stressful since you're directly opening yourself up to criticism in real-time live in person, and it's hard to really "push back" since you're not on equal footing (even though i'm faculty now and technically peers with people who interview me) because you're the one interviewing. in contrast, giving a regular talk you can push back since your job isn't on the line, and when you submit papers/grants, the criticisms aren't in real-time.

#meta -- what should you do during one-on-one faculty meetings? i find that a 3"x5" notebook with a top-spiral works really well for taking sparse notes, like a journalist's scratch pad. don't write TOO MUCH since you want to be focused on your conversation partner. seek to MAKE A CONNECTION OF SOME SORT, whether it's about your work, about their work, or in the best case, about concrete collaboration ideas. as grants get harder and harder to win, it becomes more necessary to write COLLABORATIVE MULTI-PI PROPOSALS, so look for those opportunities. take notes on salient conversation points, and send a follow-up thank-you email with BRIEF notes on your conversation and some relevant URLs of related papers, articles, or webpages to remind your conversation partner about your engagement. Keep follow-up emails short and crisp. and don't stress too much if you genuinely can't find a connection; there will be some people you meet with whose research is too far afield of your area, so you can't sensibly collaborate. in those cases, claiming that you can collaborate is too much of a stretch and risks sounding phony. don't risk sounding too schmoozy.

- if they made interesting suggestions about your research, acknowledge that in your follow-up email to remind and THANK them for their concrete suggestions; this is what you should take notes on

- in your follow-up email, find something concrete to BE THANKFUL FOR that they provided for you (advice, insights about research, insights about the department, etc.) and mention it succinctly
- also, be OK with slight pauses during conversations and let them lead if they have pressing questions; don't just filibuster by purely asking them about their research if you don't have anything better to say. of course, if the silence is too awkward, then you can ask them about their work. but in general, let THEM lead.

and what should you do during grad student meetings? show that you care about students, and DON'T BE ARROGANT/MEAN, since they'll tell the faculty about you.

Another interviewing tidbit is that people will usually be overly nice and polite to you since they want their school to look good, but trust me, if they don't like you or your work, then they will make a note of it and discuss it via email or at the faculty meeting with their colleagues. it IS an interview, after all, even if people are being super chill and polite. there may be some super-blunt mean people you'll meet, but that means they're SUPER mean in real life if they can't even muster up politeness for the interview itself.

Also, interviewer data on you will be incomplete and unstandardized; it really really depends on who's in town and free to meet with you; if someone happens to hate your work but is out of town, then you've dodged a bullet! or someone might love your work but be out of town, and you've lost a supporter. tons of randomness involved!

- people will also know wildly varying amounts about you; some will have read over your application materials/website, but most probably won't have done so

my general reflection [after 3 out of 7 interviews] is that it's very important to try to make some sort of CONNECTION with faculty during one-on-one meetings, and that meetings will vary greatly in content and style. Be a careful listener and LET THEM LEAD. If they have burning questions about your work or talk, make sure you get to address them in your 30-minute slot. Know a bit about their work as well, and ideally how it would connect to yours, so that you can make a more genuine and deeper connection. You're not gonna win with everyone -- there will inevitably be some people who don't like your work or don't get along with you personality-wise, so you can't win over everyone. Just don't get too frazzled by a bad meeting and screw up the next meeting. in reality, most faculty won't care much about you one way or another, so as long as you leave a positive impression with them, then you're fine. and in my experience, most people won't try to be assholes so they'll be POLITE to you even if they don't like your work, but behind your back when they write up their notes on you, then they will express concerns privately. it IS an interview, after all, albeit one that isn't too standardized in format.

- however, one concern i have about some one-on-one meetings is that they turn into NOPs without any good signals being exchanged one way or another. if neither party is making a connection, then they won't come away with any impressions of you, positive or negative. that apathy will be inevitable with some people, but in general, you want to push for a connection (obviously a positive one) so that they have something to REMEMBER YOU BY afterward, so find *some common ground*. then reinforce that message by referring to your established common ground in a short follow-up email. (use your 3" x 5" notebook to take brief notes to jot your memory later on what common ground you established with each person, if any). some of my most frustrating meetings in retrospect were NOP ones where we just exchanged pleasantries and small-talk, but didn't form any kind of connection. to one approximation, each faculty gets one vote when deciding who to hire, so if you miss a chance at

making a connection with someone, then they might not vote for you ... instead, they might vote for the person they connected better with (assuming they're in another sub-field and hence don't know much about your research, so they're indifferent as to which candidates' job talk they liked more)

- really, you need to reach across the aisle to appeal BROADLY to people in different sub-fields when you interview, since the majority of the faculty aren't in your specific sub-field but they all probably get a vote in the decision. that's very different than making tenure, where you need to FOCUS on being a world expert in your specific narrow sub-field to show impact
- it's also important to appear open and not too GUARDED / secretive, so if people ask where else you're applying, just tell them openly. it's not a super secret anyhow; people can gossip and find out. but things get tricky if people ask about your personal life (which they're not supposed to!)
- it's sometimes a challenge to SCHEDULE enough faculty to meet with all candidates, so it's a reality that not all of your meetings will be super relevant or enthusiastic, since many people won't really care too much. But everyone will still vote, so be careful not to piss off people

March 2016

In general, it seems *not* to pay off to spend a TON of time looking up info on specific people you're meeting with. a few bullet points will do, to orient yourself on their general research area. maybe save PDFs of relevant papers to skim on plane ride or at hotel, but people won't expect you to be super familiar with their work since they know you're busy prepping your own story.

there's definitely a "positive bias" during interviews since faculty want to present themselves and their dept in the best possible light, so they're (mostly) on their best behavior. but they *will* discuss you behind your back in private, though, so rest assured ... you ARE still being evaluated, even though things may feel like friendly conversations. it's really hard to get a clean signal on how well you did in your interview, plus you don't know how well OTHER people did, either.

- a concrete tip is to find out WHY they brought you in for an interview in the first place. what was it about your job application that stood out amongst the hundreds they received? do you somehow fit into an existing area that the department wants to strengthen or a new area they want to grow in? pay attention to those signals and be a good listener, then play up those parts of your professional identity during meetings. START BY BEING A GOOD LISTENER.

another interviewing #protip -- be super-nice to the department admins who are coordinating your interview visit; they do a lot of the behind-the-scenes logistics work, and if you end up going to the school, you want them to have a positive impression of you

- [and if they don't like you, there's a slight chance they might speak with the faculty about your attitude/behavior, which might tip the scales!]

#protip - when you're interviewing, keep plenty hydrated, take plenty of bathroom breaks as a breather, and ESPECIALLY take a longer bathroom break to chill right before your job talk, since people will likely walk you around all day and you'll get tired being ON and talking to people all the time and you have to be REALLY ON during your talk.

during one-on-ones, let the other party LEAD and be a careful listener, then respond and adapt accordingly to make your pitch so that it's well-calibrated to their needs and wants. people signed up to talk to you for a specific reason

(e.g., they're interested in collaborating with you, they're on faculty search committee, they want to add your research area to the department's portfolio, or they were arm-twisted into it reluctantly), so it's up to you to suss that out.

- they may be just on your schedule because they got arm-twisted into it and are doing it out of obligation, in which case they're probably apathetic and don't really care about your job app one way or another, which is fine too
- some things will be a crapshoot since your greatest advocate may happen to be out of town at a conference or meeting at the time of your interview, so they won't be able to speak with you in person or watch your talk
- alternatively, someone who ends up hating your work may happen to be at your talk or speaking with you one-on-one; or not!

#protip - reading department websites, recent news press releases, and watching YouTube talks of prominent faculty is a good way to get a holistic sense of what a department is about (and what they want to show off) prior to your interview

#protip - you need to respond super well to badgering tough questions during your talk without eating up too much of your time, but without getting super flustered either. it's really hard to do diplomatically when there are tough questions, since you're up there on the spot.

- your job talk is being given to a BROAD audience of people in different sub-fields who will be judging you, NOT mainly to experts in your sub-field. so expect to get some questions of the form of:
 - knee-jerk reactions from outsiders
 - middlebrow dismissals, defined here:
<https://news.ycombinator.com/item?id=4693920>
- you need to respond tactfully to those sorts of questions without seeming flustered or annoyed, while also standing your ground; it's hard!

#protip - a lot of one-on-one meetings with faculty will have them remembering you from gut impressions alone far far down the line when they vote, since usually there's no standardized feedback template where they can give feedback immediately after your interview (unlike in a more formal industry interview)

also, not everyone you're meeting with one-on-one will have the same context or level of caring about you as a candidate. they range from:

- this person is REALLY PERSONALLY VESTED in hiring in your area (or in an opposing area) this year
 - probably read your application in detail
- this person is on the faculty search committee but not in your area
 - probably read your application in detail
- this person saw your job talk and has specific targeted questions
 - hasn't read your application, but looked at your webpage
- this person saw your job talk and has some knee-jerk reactions
- this person wasn't at your job talk & doesn't know anything about you since they've never even read your application and don't know your research area
- this person doesn't care at all about this hiring slot but was arm-twisted into meeting with you to fill up the schedule; they have no context or level of care at all

Apr 2016

#protip - there's a TON of stuff about interviews out of your control, so you can't fret over them. to list a few ...

- are you too early in the order so that people forget about you?
- are you too late in the order so that people are already tired?

- did you go right after a stellar candidate so that you look weaker in comparison?
- were your supporters out of town that day so they didn't go to your talk?
- were your detractors in town that day so they DID go to your talk?

To get interviews at U.S. R1 schools, it's undeniable that it's a huge advantage to have a Ph.D. at a top-10-ish school, maybe top-25 to be more generous. If you don't have that on your resume, then aim to do a postdoc at a top-10 school. A top-10 postdoc is even more important if your Ph.D. was from outside of the U.S. A very famous/influential advisor can make up for lack of name-brand school, tho

#protip - try not to have to do too much other stuff during interview season. really clear your mind and relax when you're at home between interviews, or else you'll start feeling burned out. this should be your #1 priority right now, so don't worry about not making as much progress on new research or other endeavors. people will understand that you're super-busy in interview mode! i've been able to do some light work in the past few months but nothing super meaty or substantive. remember, it's only about 3 months -- if things work out, that could set the course of your career for the next 3 decades or more!

#protip -- your post-offer behavior is important as well since that will form early impressions of you from the dept chair, admin assistants, and your future colleauges. now is NOT the time to be a demanding asshole (well it's never a good time, but especially not now). you want them to be excited that you're joining them, not apathetic or dreading it.

#protip -- each department's chair handles negotiation and the offer process differently, so first talk to them to ask about what THEY PREFER to do, how they prefer to handle things, what the timing is. don't assume you get multiple rounds of requests -- don't move the goalposts. also, don't talk to other people in the dept about offer stuff, especially money- or resource-related stuff, since it could be perceived as tacky.

May 2016

#protip -- for post-offer negotiation stuff, only talk to the dept chair; they're your liaison to the dean and everyone else. don't talk "business" with other faculty since that can be construed as crass.

#protip - sending generous- and grateful-sounding follow-up thank-yous to your faculty interview hosts at all the schools is super super super important since you want them to have a good "final" impression of you when the process is over, even if their schools didn't end up giving you an offer. they will remain your *senior* colleagues throughout your career! it's also a good form of closure.

to succeed at job search you need to be: credentialed, credible, and charismatic
<http://pgbovine.net/how-to-get-hired.htm>

my last #protip is that you can often meet interesting people at interviews and make serendipitous connections, even at many of the schools where you ultimately didn't get an offer. don't squander those impromptu networking opportunities and connections! they're so valuable, and also super fun. i mean, people are paying you to come give a talk and chat with you ... how cool is that?!? and you might get an offer out of it in the end, but even if you don't, a bunch of people will get exposed to your work. kewl!

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