Finding Your Dream Job with a Ph.D.

Dilma Da Silva
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Twitter (@CRAWWomen)
This session for:

Graduate Students
What does CRA-W do?

Individual & Group Research Mentoring

Undergrads: Undergraduate Research Experiences
Undergrads: Distinguished Lecture series/role models
Grad Cohort: Group mentoring of graduate students
Grad Students: Discipline Specific Research workshops
Academics/PhD Researchers: Group mentoring for early and mid career @ CMW, Grace Hopper, and Tapia

600+ students & PhDs a year
# About Dilma

| Education          | BS in CS (1986), MS in CS (1990), University of Sao Paulo, Brazil  
|                   | Ph.D. in CS, Georgia Tech (1997)  
|                   | Operating Systems, Distributed Systems, HPC  
| Jobs (post Ph.D.)  | Assistant Professor, (1996-2000), University of Sao Paulo, Brazil  
|                   | Research Staff Member & Manager (2000-2012), IBM Research, NY  
|                   | Principal Engineer & Manager (2012-2014), Qualcomm Research, CA  
|                   | Department Head and Professor (since 2014), Texas A&M University  
| My dream job view | Both academia and industry are marvelous opportunities for growth and contribution. Make the best of wherever you happen to be and don’t be afraid of change!  
| Family            | Single except for 8 years 😊, caretaker commitment 2010-2015, health challenge since 1987;  
|                   | Proud of: close friendship with people living across the world;  
|                   | I have 125+ first cousins, good training for large organizations!  
| Fun               | Reading & writing, knitting, coding  
|                   | Aim at a special trip (not for work) every year  

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About Rita

ME, American University of Beirut, 1996
• Computer & Communications Engineering. Thesis work in Neural Networks and Signal Processing

Worked for a start-up (1996-2001)
• Different engineering and management positions

PhD, Columbia University, 2006
• Electrical Engineering. Thesis work in distributed networking

Research Scientist, Intel Labs, Portland Oregon 2006-2016
System Architect, Intel, Internet of Things Group, Portland OR 2016-Present
Both industry and academia can lead to outstanding rewarding careers

What do **YOU** value?

- Teaching?
- Research?
- Salary?
- Life style?
- Community outreach?
- Work-life balance?
- Turing awards?
- Something else?
Regarding going after your dream position, lots of commonalities between industry and academia tracks
Industry Track
What is a Dream Job

- Figure out:
  - Where do you want to live
  - What kind of work you want to do
  - In which direction and how much do you want to grow

- Get an internship or 2 or 3. Sometimes you are “hired” years before you graduate

- Industry jobs come in many flavors:
  - Research
  - Engineering
  - Mix
Applying for Jobs

• Apply to positions on employers website
• Be known:
  • Volunteer at local events and conferences
  • Go to talks by visiting researchers at your school
  • Ask good questions when attending talks
  • Give polished presentations at events
  • Stay in touch with alumni of your school
• Attend bigger events: career fairs, GHC, CRA-W.
• Seek (targeted) networking opportunities at technical conferences
Phone Interview

- It is a pre-screen
- Do your homework
  - Lookup the person who contacted you for a phone chat
  - Lookup the group/team
  - Read the open position (open req) closely for details that you might have missed
- Mock/practice phone interviews
On-Site Interview

• Don’t be too ambitious with your flight plan (fly the night before)

• Logistics:
  • Show up on time (or early)
  • Dress professionally
  • Be confident (don’t cross to arrogant)
On-Site Interview

• The talk:
  • Rehearse, rehearse, rehearse (you should be able to recite it without thinking)
  • Have polished slides: call out important points, use visual material, dig deep technically
  • Be polite when answering questions but don’t let them de-rail you
On-Site Interview

• Whiteboard interviews (some employers)
• Meetings:
  • Ask for the list of people
  • Research them (interests, publications, …)
  • Ask for breaks if you need to
  • Lunch and dinner are also interviews so keep the same professional demeanor.
Interviews

• Ask questions: this is your chance to figure out if you would like to work with them.
• Don’t be offended if they did not read your cv/papers closely or attend your talk.
• Look for diversity in the team.
Offer

- Congratulations you got an offer (or maybe more)
- Negotiate
  - Salary
  - Sign-in bonus
  - Moving package
  - Start date
  - Campus and flexibility
  - Presenting work at conferences
Academic Track
Getting ready – what is valued?

Research Universities
• Papers in top conferences
• Great letters
• Ability to articulate a vision, passion

Teaching Colleges
• Papers in conferences
• Teaching experience and enthusiasm
• Awareness of innovation in educational practices

Assess post-doc track
The Application Process

Early Fall
• Material: CV, teaching/research statements
  polish web site
• Recruit letter writers
• Get guidance! Get reviewers for your material

September – December
• Apply (CRA jobs, ACM & IEEE ads, SIGCSE mailing list, dept web sites)
• keep track of application status (spreadsheet)

January – April
• Interviews
  … then offer negotiations/decisions
Many factors are beyond your control! What can you do?

Take care of yourself! Sleep, eat, exercise

Be prepared to feel uneasy

• There will be times when you feel nervous, anxious, and scared. It’s normal.
• Avoid comparisons and gossiping with your peers. You won’t feel any better. Seriously.

Focus on what you CAN control
Congratulations, you got an interview! Now what?
The Interview Process

Phone interview

Site visit: individual interactions

Before, during, after: all the other stuff

Site visit: Presentations

One person or a group
Landline/skype/hangout!

Faculty of varying ranks
Administrators
Students
HR

Meals
Thank you notes
Interactions w/ staff

Research talk
Teaching demo maybe

Distribution Statement 4: (Approved for Public Release; Distribution Unlimited)
Making an impression

The Talk: Convince the audience you are smart and a good teacher/researcher

• Assume a smart but general audience but don’t dumb down the talk
• Clearly state problem and your contributions
• Show that you have ideas about what you will do when you step foot in the door
• Practice, practice, practice

One-on-one: see guidance for Industry

You are interviewing them!
Questions to ask about research

Tenure
• What are the expectations for tenure?
• How many people were denied/granted tenure in recent years?

Research Culture
• What does it take to be successful here?
• Who do you work with in the department?
• Do you work with other university faculty?

Grants
• What are the expectations about grant submission?
• What types of funding do faculty typically seek?
• What assistance is available for grant submission?
• How are research assistants supported within the department?
• What is the overhead? How much Ph.D. students cost?
Questions to ask about teaching

How Much
• What's the pre/post tenure teaching load?
• What courses would I teach?
• Do faculty ever “buy out” of courses?

Freedom and Flexibility
• How much control would I have over course content?
• Can I create new courses?

Support and Evaluation
• In what cases would I have TA support?
• What resources are available for improving teaching skills?
• How is teaching evaluated?
Offer Negotiation

Starting date & time till tenure
• A January start *may* buy you extra time on the tenure clock
• Pre-tenure sabbatical? A post-doc before joining?

Teaching
• Course releases
• which courses, when, with what level of support

Resources:
• Salary (and summer support)
• Startup: how much, spending rules and timeline
• Space, consulting rules, etc

Get EVERYTHING in writing
Good luck!

Remember:
Dream jobs can take iteration. "Dream job" can change.
What should you do next?

- Complete the GHC survey
- Apply and Share your new knowledge
- Follow up with someone you met here
- Visit CRA-Women website and Sign-Up for CRA-Women Updates
- Participate in CRA-W via Facebook, Twitter (@CRAWWomen), or LinkedIn

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