

M.S. Career Opportunities and Job Search

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Ramón Cáceres

- Grew up in Dominican Republic
- BEng in EE from McGill U in Canada
- MS in CS from UC Berkeley in CA
- Software engineer in Silicon Valley startup: Pyramid
- PhD in CS from UC Berkeley in CA
- Industrial researcher at AT&T and IBM in NYC area
- Startups in NYC along the way: Vindigo, ShieldIP
- Software engineer at Google in NYC



CRA
Computing Research
Association

Gonzalo Ramos

- From Argentina
- MS, PhD in CS, University of Toronto, Canada
- Scientist, Microsoft Live Labs; OSD (2007-2013)
- Sr Design Technologist - Amazon Concept Lab (2013-2015)
- Sr UX Scientist - Amazon Grand Challenges (2015-2016)
- Sr Researcher - Microsoft Research AI

Career Opportunities for MS Graduates

Robust job market

- Computing skills are in high demand in many industries
- There are many job options with many tradeoffs:

Position:

- Software engineer
- UX designer
- Data scientist
- Product / program manager
- etc.

Employer:

- Established company
- Startup
- Research lab
- Government
- Self
- etc.

Industry:

- Technology
- Healthcare
- Finance
- etc.

Internships

- Recommended for multiple reasons.
- Many internships lead to offers for permanent jobs.
- Teach a lot about specific positions at specific employers, also about more general job types, employer types, and industries. Help refine your preferences and goals.
- Provide opportunities for longer-term career networking.
- When doing one, try to reach out beyond your immediate project and mentor, both to learn and to network.

Destination Trade-Offs

- Scale
- Resources
- Lost in the crowd
- Defined role
- Focus
- Autonomy
- Benefits
- Flexibility

The Job Search Process

Job Search Homework

- Identify the goals and gaps to get you there
- Have a portfolio / online presence - use analytics
- Have concrete work / examples you can talk about
- Network, put yourself out there - conferences, workshops, meetups, events
- LinkedIn is your friend - contact recruiters

Preparing for your job search

- Create a concise résumé
- Maintain your professional background and interests online (e.g., personal web page, LinkedIn profile, ...)
- Consider **your** preferences to help guide your search.
 - Recall there are many different jobs. What kind would help you reach your goals?
 - Also realize it is possible to change jobs over time. You are not making a decision for life.

Interviews

Interviews

- Widely different kinds (e.g., research vs. development)
- Ask about format in advance (e.g., mix of coding vs. design questions, phone vs. whiteboard vs. computer)
- Find sample questions online and/or in books
- Practice answering questions in expected format
- Ask for clarification if question is vague
- Talk through your thinking while arriving at a solution
- Have a concrete example to underscore a point

Offers & Negotiations

- Congratulations!
- This is your chance to set terms
- Try not to give the opening bid
- It's good to have competing offers
- Negotiate \$\$ if you have a concrete alternative, or can demonstrate why they need to meet your number
- Take time to understand offer / bonuses
- Negotiate on perks if they cannot match \$\$
- To bluff or not to bluff





Special Considerations for People with Disabilities

Disabilities and the Workplace

- American Disability Act
 - Don't assume all organizations comply with ADA
 - There is no ADA enforcement
- When to disclose disability?
 - At interview if physical (visible) disability
 - At offer if invisible
- Some organizations actively seek persons with disabilities for certain product development tasks
- Advocate for what you need to be successful



Career Development / Growth

Growth

- Understand expectations and opportunities of a position
- Understand objectives and goals of your organization
- Define clear goals and set expectations for your performance
- Align with the objectives of the organization
- Regularly meet with team and manager, be proactive, make them aware of your progress, understand their expectations of your contributions
- Actively participate in meetings (sit at the table, not in the back)
- Balance between being nice and making a point
- Be visible to peers, your manager, your manager's manager
- Take on stretch assignments to grow visibility and capabilities
- Meet other people in the organization over lunch/coffee, job shadows
- Find or ask for a mentor (formal or informal)
- Take risks

Advancing

- Be pro-active about your career plans
- You can change your mind any time
- The first job most likely will not be your only job
- You own your own career
- Ask frequent, actionable feedback (manager, peers)
- Talk to people at the next level about what they do
- Volunteer to take on roles above your current position
- Train your replacement
- Work with advocates to build a case for promotion before the decision window opens



Group Activity

Elevator Pitches

- There are frequent opportunities to answer questions such as “What are you working on?”
- Have ready a 1-minute pitch about a favorite project
- Make it concise and meaningful
 - Motivation: Why is it important?
 - Methodology: What skills did you employ?
 - Results: What was the outcome (so far)?
- Follow up with more detail if there is interest

Short exercise

- 1 minute: Think about your own answer to “What are you working on?”
- 1 minute: Pick a partner sitting next to you.
- 1 minute: Partner 1 gives answer to Partner 2.
- 1 minute: Switch roles.

Resources

Job Search Resources

- *Cracking the Tech Career* by Gayle Laakmann McDowell.
crackingthetechcareer.com
- *Cracking the Coding Interview* by Gayle Laakmann McDowell. crackingthecodinginterview.com
- ...plus many other resources available online

