Summer Internships
Meredith Ringel Morris, Google Research
Cynthia Phillips, Sandia National Laboratories

2022 Grad Cohort for IDEALS
About Merrie

Education:
• Sc.B. in CS, Brown University
• Ph.D. in CS, Stanford University

Career:
• 2006-2021: 15 years at Microsoft Research
  – Founder of Ability research team
  – Research Area Manager for HCI
• 2021-Now: Director & Principal Scientist of People + AI Research (PAIR) team at Google Research
• Affiliate Professor, University of Washington, Paul G. Allen School of Computer Science and Engineering
• SIGCHI Academy, ACM Fellow
• Has mentored ~60 interns at Microsoft & Google
About Cindy

Education:
• A.B. in Applied Math, Harvard University
• Ph.D. in CS, MIT

Career:
• At Sandia National Laboratories since 1990
  – Currently senior scientist (about 50 out of 14k)
• Combinatorial optimization, parallel computing, data science, streaming, co-design, security, graph algorithms, applications, ....
• Theory, experiments, applications
• SIAM fellow and ACM distinguished scientist
• Have supported undergraduate and graduate interns (usually at most one per year), but Sandia has a healthy program.
Practical Value of Internship

• Experience
• Improve resume (+ papers)
• Try out potential career alternatives
  – Industry
  – National Laboratory
  – Academia (teaching internship)
• Live in a different area
• See different work environments
  – research, product, etc.
• Sharpen your research area at school
• Widen professional circles (another letter writer)
Decision for an Internship

- Will it take away or enhance your dissertation research?
- Is it the right time?
  - Do you need the time to complete the writing of your dissertation?
  - Are there publication deadlines you might miss?
- Is it the right kind of internship?
  - Will it build up your skill set?
  - Will it lead to publications?
Getting Started: Finding An Internship

- Common Intern Hiring Windows
  - November
  - February
- Professors and advisors contacts
- Apply to / through large national programs (SHPE, NSBE, NACME, etc.)
- Career Centers
- Network!
  - Conferences
  - Career fairs
  - Professional meet-ups
Preparing your application materials and yourself

- Get your web page up-to-date – highlight experience
  - Link in a copy of your CV (get critiques)
- Create a LinkedIn page
- Do mock interviews
- Identify at least three references
- Develop and practice an ‘elevator pitch’
- If on a visa, know what paperwork is expected
Interview: Putting Your Best Foot Forward

• Before the interview
  – Ask about the format of the interview
  – Research the company/group/personnel

• The Interview
  – Show motivation and enthusiasm
  – Ask clarifying questions
  – Ask about particular projects
  – Talk through as you answer technical/complicated questions
  – Be ready to ask a few questions of each interviewer
  – Ask about their decision timeline

• After the Interview
  – Send thank you notes to the folks that you meet
  – Follow up in ~1 month
Interview: Common Questions

• What are your strengths/weakness?
• Tell me about your research?
• What is the largest project you worked on? What was your role?
• Give an example of how you handled a difficult situation
• Puzzle/Brain teaser
• Coding Challenge
Now That You Got the Job, What’s Next?

• Before the Start Date
  – Ask what to prepare
  – Agree start/end + any necessary time off

• On the Job
  – Do a good job!
  – Understand expectations and deliverables
  – Keep your supervisor informed of your progress
  – Interact with the people around you (learn the culture)
  – Attend talks and seminars
  – Work independently but don’t be afraid to ask for help
  – Have fun!
Post Internship: What’s Next?

• Keep in touch with host, recruiters, etc.
• Ask about the hiring process for full time
• Ask about the potential for returning next year
• Write a paper about the work
Exercises to try back at school
Exercise #1: The Elevator Pitch

Elevator Pitch Requirements:
- Duration should be no more than 60 seconds
- Sections should include
  - Problem area background / motivation
  - Problem statement
  - Technique created / used
  - Results
  - Conclusions

Exercise Activity:
- Form groups of your peers / advisors
- Practice giving elevator pitch
- Group members help critique with a focus on 3 areas
  - Clarity
  - Timeliness
  - Story Completion
Exercise #2: Mock Interviews

- Pair up with one person.
- Play the interviewer and the other the interviewee.
- Then switch roles.

- Format
  - 5 minute questions
  - 3 minute feedback