GET A JOB!

Breaking into the Tech Industry
Topics

- Opportunities at Harvard
- Resumés
- Interview Format
- Getting Ready
- Presenting Yourself
- Answering Tech Questions
- Following Up
Opportunities for Harvard Students
Opportunities for Harvard Students

- Office of Career Services (OCS)
  - Harvard specific policies for participating companies
  - Interview and resumé resources

- Crimson Careers
  - Job postings
  - Internship offers
Typical Roles

- Program Manager (PM)
- Software Developer (Dev)
- Software Tester (Test)
- User Experience (UX)
  - designs user interface and interaction
Program Manager (PM)

- Customer-oriented
- Designs and cuts features and products
- Manages time control
- Oversees projects
Software Developer (Dev/SWE)

- Writes code
- Develops features
- Unit-testing
Software Tester (Test)

- Finds bugs
- Handles performance and stress testing of dev code
Resumés

- Tailor your resumé to the job or internship for which you are applying.
- Don’t exaggerate; be prepared to demonstrate knowledge or skills you claim to have!
- Include relevant experience and explain your role in past projects.
- Note your contribution!
  - Active verbs: headed, led, contributed, etc.
- Only include languages you actually know
  - Clarify your relative level of familiarity if unsure
The Tech Interview

IKEA Job Interview

Please have a seat
The Tech Interview

- First round interview
  - Usually 1 hour-long interview

- Final round interview
  - Usually 3-5 30-60 minute interviews

- Interview structure
  - Introductions
  - Resumé/experience questions
  - 1 longer problem or 2 smaller ones
    - Potential follow-up questions
  - Questions for the interviewer
Core Technical Knowledge

- Language Syntax (Know at least one well!)
- Linked Lists
- Sets, Hash Maps, Trees, Graphs
- Recursion
- Object-oriented programming
- Algorithms (Search, Sort, etc.)
- Time/Space Complexity and Asymptotic Notation (Big O)
Getting Ready

- Brush up on at least 1 language
- Review data structures
- Practice sample questions

Other resources:
- Programming Interviews Exposed by: John Mongan, Noah Suojanen and Eric Giguère
- Programming Pearls by: Jon Bentley
Working Out Loud

- Interviewers want to know how you solve problems
  - Less about solution, more about process
- Act as if you are working through the problem with the interviewer
- Share your thoughts and ideas, regardless of whether you are sure that they are right
- Advantage of seeing how they react to your ideas
Getting Unstuck

- Ask clarifying questions.
- Work through your thought process out loud.
- Ask for hints if you need one.
- If you don't know, bluffing won't work.
- Don't panic.
Interview Questions

- Coding Questions
- Product Questions
- Logic/Problem-Solving Questions
Coding Question

- Given a linked list, determine whether it contains a cycle.
Coding Question

- Given a positive real number, find the square root.
- (No calling an existing square root function!)

\[ \sqrt{x} = ? \]
Product Question

- Design a remote control for a television with 2 buttons.
Product Question

- What is your favorite product we make? What do you like about it?
Followup questions

- **Tech questions**
  - What's the run time of your code?
  - Can you improve it? If so, how?

- **Design questions**
  - What if this parameter was changed?
  - How might we design a back end to this?
Personality and Fit

- Why are you interested in this position?
- Why are you interested in working with this company?
- What group projects have you been a part of?
- How have you handled conflict in groups?
- What projects have you worked on outside of your academic work?
Following Up

- Ask them when you can expect to hear back
  - If you don't hear back by then feel free to send an email to your recruiter

- Ask how long you have to accept/decline your offer
  - Note OCS companies have special restrictions
Questions?
More to come!

- Sign up for ‘Acing Your Technical Interviews’ at cs50.net/register!
- Provide us feedback at: