

First Day!

Andi Hopkins ◦ Maria McCulley ◦ Sandra Sandeep

Andi Hopkins



- Senior
- Computer Science Major, Astronomy Minor
- Experience
 - CMSC250 TA for Spring 2017 & Fall 2017
 - Mantech: Advanced Cyber Training Program (Certification)
 - Facebook Summer Internship 2018
- More about me:
 - During my Mantech interview, I forgot how to allocate memory in C...
 - During my Facebook interview, I got really sad that I missed a bug, and I rolled around on the floor with my interviewer.
 - I drive a scooter...



Maria McCulley

- Junior
- Math and Computer Science Double Major
- Experience
 - Maryland Cybersecurity Center
 - General Electric: Summer 2017
 - Facebook: Summer 2018
- More about me
 - Resident Assistant
 - ACES
 - Excited to be striding into the semester with you guys!



Sandra Sandeep

- Sophomore
- Computer Science Major, Project Management Minor
- Experience
 - CMSC131 TA: Fall 2017
 - CMSC216H TA: Spring 2018
 - Former Maryland Center for Women in Computing Teaching Ambassador
 - Northrop Grumman: Summer 2017
 - Google EP: Summer 2018
- More about me:
 - I love soccer!
 - I love cooking food and trying new food :)
 - I may or may not be somewhat easily excitable...



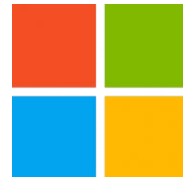
Interviews in General

What to Expect:

- Some type of behavioral question
- Usually 45mins - 1 hour
- Could be phone, skype, in-person on a whiteboard
- Be prepared for anything!



Companies



- Google:
 - Engineering Practicum, you get 2 technical phone interviews, a behavioral with recruiter, then get reviewed by a committee. Guaranteed host matching.
 - Internship, 2 interviews of any type, then flown out to Mountain View for 3+ onsite
- Facebook
 - 2 phone interviews or one on-campus, then flown out to Menlo Park for 1 on-site
- Microsoft
 - 1 phone interview or 1 on-campus, then flown out to WA for 3-4 on-sites that could be behavioral or technical.
- Amazon
 - 2 online coding challenges. If most efficient, get offer on the spot (happened to Andi's friend). If not, get flown out for on-site interviews.
- Cybersecurity Companies (not as code-intensive)
 - ManTech
 - Behavioral phone call with recruiter, and 1 on-site for a 2 hour long interview
 - Northrop Grumman
 - Invite for one interview, not coding heavy
 - Leidos
 -
 - NSA
 - Online application

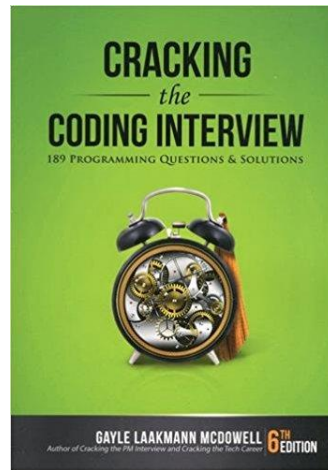
Tips on How to Approach Coding Interviews

- General Tips

- Brute force solution
- Analyze time and space complexity
- Improve solution!
- Use test cases!

- Resources

- Cracking the Code Interview
 - We have copies that you can borrow!
- HackerRank
- LeetCode



Sample Interview Question

Given a list of positive integers and a target integer, determine if there is a consecutive subsequence of integers that sum to the target integer.

- Brute force solution
- Analyze time and space complexity
- Improve solution!
- Test cases!



Grading!

- 30% Class Participation
- 20% Homework
- 20% Midterm
- 30% Final

Weekly Homework

- Solve a given coding problem online on HackerRank / LeetCode
- Take screen recording of you solving the problem with <https://screencast-o-matic.com/> and upload to your personal Google Drive
- Share the video link via private Slack message to your designated TA
- Due at 10:55AM every Friday (immediately prior to class)
- 20% late submission deduction for each day late

Weekly Homework

Grading

- Effort
 - 30 points
- Test Cases
 - 30 points for passing test cases
- Timing
 - 30 points for solving it in the allotted amount of time
 - Incrementally decreasing credit for solving in up to twice the allotted amount of time
 - 0 credit for academic dishonesty or not solving in up to twice the allotted amount of time
- Time and Space Complexity
 - 10 points for optimal solution
 - Incrementally decreasing credit for worse time and space complexities. Points vary per problem



Extra Credit Opportunities

- Extra credit opportunities will be offered throughout the semester
- HW Extra Credit
 - Extra problem given with each HW
 - Expect it to be more challenging than the other HW questions
 - Write a paragraph response explaining how you would solve the problem/time complexity
- Career Fair
- Another TBD later...
- 10 points each, for a total of 100 points of Extra Credit, to count for 5% extra credit.

Your First Homework!

1. Turn in your resume!
 - a. DUE Monday, January 29th (11:59 pm)
2. We will critique your resume by
 - a. DUE Wednesday, January 31st (11:59 pm)
3. Submit your updated resume by
 - a. DUE Friday, February 2nd (10:59 am)
4. Bring your updated resume to class