

Technical Interviewing Extratation

Introduction

- ▶ Interviewing is not something that can really be taught. You can give guidance and pointers, but it's all about practice.

How to prepare for an interview

- ▶ Review common data structures (you'll learn them in 122)
- ▶ Review common algorithm questions. Don't mess up on an easy question!
- ▶ Make sure your resume doesn't mention anything you're not comfortable talking about.
- ▶ Look into what the company does so that if they ask you why you'd want to work for them you won't be struggling to answer.

Pre-interview routines

- ▶ It's helpful to have some pre-interview routine that gets you ready to do an interview.
- ▶ Improving your confidence in any way will always make your interview go more smoothly.

How to talk during an interview

- ▶ You're most likely being interviewed by an engineer. They don't expect you to be the biggest algorithm master on the planet. They want to make sure that if you get hired that they'd be happy to have you on their own team.
- ▶ Be excited about the company. Don't let the interviewer get the vibe that this isn't your first choice.
- ▶ Make sure to always be talking about your thought process. Silence is bad.

What kind of questions to expect during an interview

- ▶ For the most part, you won't get asked terribly difficult interview questions.
- ▶ Most interview questions you'll encounter will be easily solved using a hashtable.
- ▶ Interview questions are meant to be solvable in a short amount of time, but usually there are multiple stages to the answers.

How to solve interview questions

- ▶ If you have an answer, say it! If it's not the best answer, you'll have a chance to optimize. It's better to have a bad answer than no answer.
- ▶ Pretend it is office hours. The interviewer wants to see you succeed.
- ▶ Take the hints.

Common array questions

- ▶ List of integers in a bounded range where every element is in there twice except one. Find the non-duplicated element.
- ▶ Determine if two strings are anagrams.
- ▶ Sort an array with integers 1...n in linear time.
- ▶ Find first common character in two strings.

Common Linked List questions

- ▶ Print out the elements in a linked list in order.
- ▶ Detect a cycle in a linked list.
- ▶ Reverse a linked list.

Common Tree questions

- ▶ Flip a tree.
- ▶ Print out elements level-by-level.

Final tips

- ▶ Technical interviewing is a horrible way to hire. Don't take it personally when you get rejected.
- ▶ Be confident, not arrogant.
- ▶ Find interview practice sites.