Online Technical Interview Bootcamp at Stanford Information Session

Yongwhan Lim Thursday, March 9, 2023

Yongwhan Lim









Education





Part-time Jobs







Full-time Job





Workshops















Coach/Judge





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Yongwhan Lim









- Currently:
 - a Co-Founder in a Stealth Mode Startup;
 - ICPC Internship Director;
 - Columbia ICPC Head Coach;
 - ICPC Judge for NAQ and Regionals;
 - Lecturer at MIT;
 - Adjunct (Associate in CS) at Columbia;



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Information Session: Overview

- Logistics
- What is technical interview?
- Important Reminders

Online Technical Interview Bootcamp at Stanford

- Time Slot: 12pm PT 2pm PT
- Dates: <u>Sundays</u> from April 9 to June 4 (9 sessions)
- Zoom Registration: <u>Link</u>

Structure

- On the first hour, we will cover major topics required in technical interview preparations, through quickly introducing topics, followed by a few exercises curated for each topic.
- On the second hour, we will go over selected problems from weekly live contests (LeetCode, AtCoder, and CodeForces).
- Top 3 presenters (e.g., Gold, Silver, Bronze) will get some prizes (TBD), on top of bragging rights!

(Optional) Textbooks

Algorithm and Data Structures Interview

o Elements of Programming Interviews: The Insiders' Guide, 2nd Edition, Adnan Aziz et. al.

Competitive Programming

- Competitive Programming 4, Halim et. al.
- Guide to Competitive Programming, Laaksonen

System Design Interview

- System Design Interview: An insider's guide, 2nd Edition, Alex Xu
- o The System Design Interview, 2nd Edition, Lewis C. Lin, et. al.

Introduction to Algorithms (CLRS)

Workshop Objectives

- Master the fundamentals needed to succeed in any entry-level technical interview at top-tier IT companies.
- We will also touch on some of the system design and behavioral interview questions (even if those are typically not part of the entry-level technical interview loop).
- Along the way, we will give you a feel for what software engineers do on a day-to-day basis.
- Build your problem solving ability through actively working on problems from popular programming websites like LeetCode, AtCoder, CodeForces, etc.

Popular Language Choices

- **C++**: Pick this one especially if you are considering to do ICPC
- Python
- Java

Assignments!

- Active participation in <u>LIVE</u> contests:
 - LeetCode; CodeForces; AtCoder;
 - Meta Hacker Cup; TopCoder Open;

- Practice on:
 - CSES; CodeForces; AtCoder; LeetCode; Project Euler; UVa; SPOJ; Kattis; USACO; ...

Daily Zealot Set (through discord channel)

Important Note

- Do <u>NOT</u> be AFRAID to ask! I <u>love</u> students asking questions.
- I am here to make you all succeed/pass in the actual interview.
- You can think of me as a coach rooting for your success in life.
- Let's pull this through together; I will lead you through this journey!

I am ready! ARE YOU?

Questions so far?

If not, before finishing up, let's dive right into the "light" technical topic:
 what actually is the technical interview?

Interview

• There are generally two types of interview: *technical* and *behavioral*.

• This bootcamp will focus on **technical** interview.

Technical Interview

- There are:
 - recruiter call
 - 0-1 online coding challenge
 - 2-3 technical phone screens
 - 4-7 onsite interviews
 - 0-5 fit calls and negotiation
- There are two types:
 - data structures and algorithms
 - system design problems
- Assuming most people are going for entry-level, we will mainly focus on the first type.

Interview Topics

Fundamentals

- Primitive Type
- Array & Linked List
- Binary Tree
- Heap
- Sorting

Important

- Stack & Queue
- Hash Table
- Binary Search Tree
- Searching
- Recursion

Real Differentiators

- String
- Dynamic Programming
- Greedy Algorithm and Invariant
- Graph

Closing...

Important Notes

- Browse through <u>Terse Guides</u>, which include:
 - Behavioral interview preparation
 - System design interview preparation
 - ICPC preparation
 - Live contests
 - Useful resources

- Some discord server invitations:
 - o [Online Technical Interview Bootcamp at Stanford] https://discord.gg/alwHBccg3n
 - [ICPC CodeForces Zealots] https://discord.gg/QC9ss6WJPy

1:1 Meeting Opportunity

 If you would like to meet in 1:1, please sign up using: <u>https://calendly.com/yongwhan/one-on-one</u>.

I'd love to help you landing your <u>dream</u> job!

Contact Information

• Email: yongwhan.io

Personal Website: https://www.yongwhan.io/

- LinkedIn Profile: https://www.linkedin.com/in/yongwhan/
 - Feel free to send me a connection request!
 - Always happy to make connections with promising students!

