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# **2 Day Special Workshops** **for Technical Interviews**

**Day I**

— Yongwhan Lim —  
7pm, Wednesday, March 3, 2023

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# Yongwhan Lim



## Education



## Part-time Jobs



## Full-time Job



## Workshops



## Coach/Judge



<https://www.yongwhan.io>

# 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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# Overview

- **Part I: Interview Preparation**
  - Interview Types
  - Technical Interview
  - Interview Topics
  - Interview Preparation Resources
- **Part II: Competitive Programming**
  - CodeForces
  - ICPC

# Part I: Interview Preparation

# Interview Types

- Technical Interview
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- Behavioral Interview
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# Technical Interview

- Recruiter Call
- 0-1 Online Coding Challenge
  - automated screening with 2-3 questions.
- 2-3 Technical Phone Screens
  - first technical conversation with human.
- 4-7 Interviews in Onsite
  - similar to phone screening but more in-depth; you may get probed on your claimed expertise.
- 0-5 Fit Calls & Negotiation



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# Interview Topics

- **Fundamentals**
  - Arrays and Linked Lists
  - Binary Trees
  - Heaps
  - Sorting

# Interview Topics

- **Important**
  - Stacks and Queues
  - Hash Tables
  - Binary Search Trees
  - Searching
  - Recursion

# Interview Topics

- **Real Differentiators**

- **Strings:** Knuth Morris Pratt (KMP); Rabin Karp / String Hashing; Suffix Array; Suffix Automaton;
- **Dynamic Programming:** 1D; 2D; Interval; Tree;
- **Greedy Algorithms** and Invariants: Matroid;
- **Graphs:** Shortest Path; Flow / Matching; Minimum Spanning Tree;

# Interview Preparation Resources

- **Popular Websites**

- LeetCode: Solve all four weekly/biweekly problems in **20 minutes!**
  - $1+2+4+8 + 5$  buffer
- CodeForces: Get to 2200+ rating
  - Clear 5 questions out of 6 **fast!**
- AtCoder; TopCoder; CodeChef;

- **Annual Contests**

- ~~Google Code Jam~~; Meta Hacker Cup; ~~TopCoder Open~~;

# Interview Preparation Resources

- **Elements of Programming Interview**
- **Competitive Programming 4**



# Part II: Competitive Programming

# CodeForces

- Get to **2200+** rating as fast as you can!
- Join the training sessions through **ICPC CodeForces Zealots** (<https://discord.gg/7bvMnMyF6G>).

# International Collegiate Programming Contest (ICPC)

- If you would like to get involved in helping out as a volunteer or an official (unpaid) intern, please reach out to me at [yongwoods@icpc.global](mailto:yongwoods@icpc.global).

# 1:1 Meeting Opportunity

- If you would like to meet in 1:1, please sign up using:  
<https://calendly.com/yongwhan/one-on-one>.
- I'd love to help you landing your dream job!

# Sneak Peek into Part II...

- We will briefly touch on how to do well in:
  - **Behavioral** Interviews;
  - **System Design** Interviews;
  - **Machine Learning/Data Science** Interviews;
- We will have few **typical example questions** that you can expect on each of these interview types!

# Contact Information

- Email: [yongwhan@yongwhan.io](mailto:yongwhan@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!