# Yongwhan Lim

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Citizenship Status	Permanent Resident of the United States of America.	
	Citizen of the Republic of Korea.	
Education	Massachusetts Institute of Technology	9/2013 - 1/2016
	Ph.D. (Extended Leave of Absence) Operations Research Advisor: Asuman Ozdaglar 2013 Kwanjeong Scholarship recipient, for the entire duration of Ph.D.	
	Stanford University	9/2007 - 1/2013
	<ul><li>M.S. Computer Science (AI Track)</li><li>B.S. Honors Computer Science (AI Track) and Mathematics</li><li>Advisors: Fei-Fei Li and Persi Diaconis</li></ul>	
Languages	C++ w/ the Standard Template Library.	
	Comfortable with Java, Go, Python, SQL, Angular Dart, MATLAB, and	R.
	Fluent in English and Native in Korean.	
Professional Experience	Two Sigma Investments Senior Quantitative Software Engineer (Derivative Engineering)	7/2022 —
	Google	10/2016 - 6/2022
	Research Software Engineer (Machine Learning Research)	3/2021 - 6/2022
	Research Software Engineer (Brain Research)	5/2019 - 11/2021
	Tech Lead (Kick Start Practice Rounds)	10/2020 - 11/2021
	Software Engineer (TensorFlow Runtime)	9/2020 - 2/2021
	Software Engineer (Ads)	10/2016 - 5/2019
	Research Assistant (MIT) Optimization & Network Game Theory Grow	up Fall 2013 – Fall 2015

 ${\bf Software\ Development\ Engineer\ Intern\ (Microsoft)}$ 

Research Assistant (Stanford) Computer Vision Lab

 $Summer\ 2012$ 

Fall 2009 - Fall 2011

# Teaching Experience

Rated 5.0/5 at Columbia University based on 28 reviews https://www.ratemyprofessors.com.

### Spring 2023

Lecturer (MIT)

Associate in Computer Science (Columbia)

Competitive Programming (COMS 4995-8)

## Independent Activities Period (IAP) 2023

Lecturer (MIT)

Problem Solving Strategies for Technical Interviews

#### Fall 2022

Lecturer (MIT)

Associate in Computer Science (Columbia)

Technical Interview Preparation in C++ (COMS 4995-7; 48 students + 74 observers)

Competitive Programming (COMS 4995-8; 53 students + 49 observers)

Visiting Instructor (Cornell-Tech)

Special Workshop Series in Technical Interview Preparation (148 students + 1 observer)

#### **Summer 2022**

Lecturer (MIT)

Develop MITx MicroMasters working with Professors Aleksander Madry and Asuman Ozdaglar.

Research Mentor (Harvard) Summer Introduction to Mathematical Research (SIMR) Program

Lecture on network flows

Mentor undergraduate math majors on quantitative analysis in finance.

## Spring 2022 [link]

Associate in Computer Science (Columbia)

Technical Interview Preparation in C++ (COMS 4995-13; 52 students + 80 observers)

Course Evaluation Overall Instructor Quality: 4.91/5 from 45 students out of 52 students

Visiting Lecturer (Cornell-Tech) Deep Learning (CS 5787)

## Fall 2021

Lecturer (CSU Sacramento) Introduction to C Programming (CSC 25)

Lecturer (SJSU) Introduction to the Design and Analysis of Algorithms (CS 155)

Lecturer (CSU East Bay) Professional Development in Computer Science (CS 497)

#### Summer 2021

Lecturer (UC Santa Cruz) Beginning Programming in Python (CSE 20)

#### Spring 2021

Lecturer (UC Santa Cruz) Beginning Programming in Python (CSE 20)

Lecturer (CSU East Bay) Professional Development in Computer Science (CS 497)

## Fall 2020

Guest Lecturer (Harvard) Advanced Practical Data Science (AC 295)

Guest Lecturer (UC Davis) Software Engineer Early Career Planning (ECS 198)

#### Fall 2011

Teaching Assistant (Stanford) Introduction to Computer Vision (CS 231A)

#### Fall 2008 - Spring 2012

Grader (Stanford) Department of Mathematics

**Tutor** (Stanford) Department of Mathematics

# Invited Talks Special Workshops on Technical Interviews [slide decks]

Stanford University Stanford Alumni Association (host: Michelle Badger) 2/22/2023 & 3/8/2023 1/19/2023? & 1/26/2023? Stanford Computer Forum (host: Trudy Gonzalez) Stanford Computer Forum (host: Trudy Gonzalez) 10/5/2022 & 10/6/2022 Carnegie Mellon University – Silicon Valley Fall 2022: CMU Career Services (host: Leigh Mason) 10/6/2022 & 11/11/2022 Fall 2021: CMU Career Services (host: Leigh Mason) 9/7/2021 & 10/5/2021 & 10/14/2021 Spring 2021: CMU Career Services (host: Leigh Mason) 2/25/2021 Haas School of Business, University of California – Berkeley (host: Park Sinchaisri) 11/21/2022 University of California – San Diego (host: Jingbo Shang) 10/14/2022 & 10/21/2022 Harvard University (host: Office of Career Services) 10/14/2022 University of Southern California (host: Cristina Fong) 11/18/2022 & 11/19/2022 National University of Singapore Spring 2023: Computer Science (host: Steven Halim) 2/21/2023 & 2/23/20223 9/21/2022 & 9/22/2022 Fall 2022: Computer Science (host: Steven Halim) 8/17/2022 & 8/18/2022 KAIST (host: Juho Kim) Seoul National University (host: Taesup Moon) 8/24/2022 & 8/25/2022 UNIST (host: Myeongjae Jeon) 9/28/2022 & 9/29/2022

## "CS is a Dream Come True!" [slide deck]

Michigan Math and Science Scholars (host: Mark Conger) 7/7/2022 Columbia Research Symposium (host: Emerging Scholars Program) 4/22/2022

# Coaching Experience

### Judge

ICPC Mid-Central Regional	10/2022 -
Head Coach Columbia ICPC [link]	2/2022 -
110 members (3 world finalists, 59 eligibles, and 48 ineligibles) and growing.	
Soon to be officially sponsored by multiple companies.	
Weekly Sunday ICPC Practice Contests from 12pm ET to 5pm ET.	Fall 2022 -
Weekly ICPC Practice Contests from 12pm ET to 5pm ET.  Sum	mer 2022 –
2022 Columbia University Local Contest (CULC) is organized.	9/25/2022
Columbia-fortcoders qualified to $2022$ ICPC World Finals, to be held in $11/2023$ .	
Columbia-fortcoders is ranked 8th in 2022 NAC.	5/30/2022
Columbia-fortcoders is invited to 2022 North America Championship (NAC).	3/6/2022
Columbia-fortcoders is invited to 2022 North America Programming Camp (NAPC).	. 3/6/2022
Columbia-fortcoders won 2021 ICPC North America Greater New York Regionals.	3/6/2022
13 Columbia teams represented in 2021 Greater New York ICPC Regionals.	3/6/2022

International Collegiate Programming Contest (ICPC) Greater New York Regional

# Research Mentoring Experience

## Columbia University

ICPC North America Qualifier

Fall 2022 -

2/26/2023

10/2022 -

Samanway Sadhu (SEAS CS MS '22 [Fall]; co-advised with Professor Suman Jana)

Tobias Hanl (SEAS CS MS '23 [Fall]; co-advised with Professor?) Ziwei Han (SEAS CS MS '22 [Fall]; co-advised with Professor?)

# Harvard University

Summer 2022 -

Alessandro Barbiellini Amidei (Math AB '25 [Spring])

John Michael Boesen (Applied Math+CS AB '25 [Spring])

Iris Lang (Statistics+CS AB '25 [Spring])

Will Hahn (AB '25 [Spring])

Jarell Cheong Tze Wen (Math AB '25 [Spring])

AnaMaria Perez (Math AB '24 [Spring])

Mayesha Soshi (Applied Math AB '24 [Spring])

Andrew Van Camp (Applied Math AB '23 [Spring])

Industry Mentoring Experience Two Sigma (2022 NewTS Senior Mentor)

10/2022 -

## Software Engineer Intern Co-Host (Google)

Summer 2018 Spring 2022 –

## Columbia University

## **Undergraduate Students**

Christopher Yoon (CC CS BA '24 [Spring]; Summer 2023 Internship at Virtu)

Hanfang Luo (CC CS BA '24 [Spring]; Summer 2023 Internship at Amazon)

Mauricio Gonzalez (CC CS BA '23 [Fall]; TBD)

Eumin Hong (CC CS BA '23 [Spring]; TBD)

Ethan Zachary Turok (SEAS CS BS '23 [Spring]; TBD)

Gilead Turok (CC CS+Applied Math (double) BA '23 [Spring]; TBD)

Anais Lawson (SEAS CS BS '23 [Spring]; TBD)

Chiamaka Chukwuka (SEAS CS BS '23 [Spring]; TBD)

Andrew Sirenko (SEAS CS BS '23 [Spring]; TBD)

Venkat Ramamoorthi (GS CS BA '23 [Spring]; TBD)

Benjamin Snyder (SEAS CS BS '22 [Spring]; Full-time at Google)

Yuqi Zhang (SEAS CS BS '22 [Spring]; Full-time at TikTok)

Olivia Zhang (SEAS CS BS '22 [Spring]; Full-time at Goldman Sachs)

Andreas Cheng (GS CS BA '22 [Spring]; Full-time at IXL Learning)

### **Graduate Students**

Yin Zhou (SEAS Applied Math PhD '25 [Spring]; TBD)

Ian Dorian Macleod (SEAS CS BS '23 + MS '23 [Spring]; Full-time at Scale AI)

Wenging Zhong (SEAS CS BS '22 + MS '23 [Spring]; TBD)

Suro Lee (SEAS CS MS '23 [Fall]; TBD)

Jiaqing Chen (SEAS CS MS '22 [Fall]; TBD)

Guoxin Yin (SEAS CS MS '22 [Fall]; TBD)

Rong Bai (SEAS CS MS '22 [Fall]; TBD)

Gaurav Sinha (SEAS CS MS '22 [Fall]; TBD)

Ziwei Han (SEAS CS MS '22 [Fall]; TBD)

Xiaoyu Liu (SEAS EE MS '22 [Fall]; TBD)

Shihao Wang (SEAS CS MS '22 [Fall]; Full-time at Amazon)

Xijiao Li (SEAS CS BS '21 + MS '22 [Spring]; Full-time at Google)

Danrui Yu (SEAS CS MS '22 [Spring]; Full-time at Google)

Sri Hari Thikkireddy (SEAS CS MS '22 [Spring]; Full-time at Google)

Tim Kao (SEAS CS MS '22 [Spring]; Full-time at Google)

Zhen Lei (SEAS CS MS '22 [Spring]; Full-time at Amazon)

Zhihao Jiang (SEAS CS MS '22 [Spring]; Full-time at Amazon)

#### Résumé Critiques

120+ résumés

#### 45-Minute Mock Interviews

30+ sessions

## Cornell-Tech

Fall 2022 -

#### **Graduate Students**

Subin Yun (Information Systems MS '24 [Spring]; TBD)

Pingyue (Pamela) Pan (Information Systems MS '24 [Spring]; TBD)

Adrian-Petru Surani (CS MS '23 [Spring]; TBD)

JaeEun Lee (CS MEng '23 [Spring]; TBD)

#### Community Service

4/2019 -

Emma Nieh

10/2022 -

Bolim Lee (University of London; CS BSc '25; TBD)

3/2022 -

Soyeon Wang (San Jose State University CS BS '21; Full-time at Amazon)

4/2019 - 12/2020

Community	
Service	

Presenter (Two Sigma: Work in Progress) 10/20/2022 Co-Instructor (Two Sigma: Competitive Programming) 10/2022 -Program Committee (ACM SIGCSE Technical Symposium 2023) 8/2022 -Discord Channel Owner 3/2022 -Problem Solving Warriors: 317 members and growing! Hedge Funds Warriors: 225 members and growing! ICPC Training Warriors: 188 members and growing! Cornell Tech Interview Prep Workshop: 100 members and growing! Stanford University Outreach Volunteer Alumni Link (OVAL) Interviewer 1/2022 -Volunteered to conduct 20+ alumni interviews in NY, NJ, and MA chapters. Tech Lead (Google Kick Start Practice Rounds) 10/2020 - 11/2021Selected problems to use in the practice round. Set up contest dashboards for participants to use. Mentored engineering volunteers in order to guide them to complete their tasks. Appeared on videos to go over the solutions to problems and introduce the program. Software Engineer Interviewer (Google) 2017 - 2022Volunteered to conduct 55+ interviews at Google. 4/2019 - 12/2020Software Engineer Instructor (New Community Baptist Church) Taught C++, algorithms, and computer science mathematics ground-up, 4 hours every Saturday. Created course syllabus outlining the entire contents of the course. Created slides weekly following the syllabus and presented them to students. Assigned homework weekly and discussed its solutions the following week. Discussed problem solving strategies: data structure, graph, math, string, and geometry. Competitive Programming Group Founder (Google) 11/2017 - 1/2021Created an internal group in Google for those who want to excel in programming contests. Met twice each weekday, two hours each: 8am and 5pm. Google Code Jam Monitor (Google)

2018 - 2022

Google Code Jam is an annual programming contest to recruit software engineers at Google. Monitored to answer questions contestants asked during the live contest.

# Leadership Experience

**Technical Committee** (MIT Digital Learning Lab) 10/2022 -Co-lead w/ Rachel Krohn (ICPC: New Coach Document Development) 10/2022 -Co-lead w/ Etienne Vouga (ICPC: Curriculum Development) 7/2022 -East-Coast President (Kwanjeong Scholarship) Academic Year (AY) 2013 Social Chair/Webmaster (Stanford) Symphony Orchestra AY 2010 & 2011 Vice-President (Stanford) Mathematics Organization AY 2009 Webmaster/Historian Director (Stanford) Korean Student Association AY 2009

## Selected Publications

**Operations Research** (MIT) Yongwhan Lim, Asuman Ozdaglar, and Alexander Teytelboym. "Competitive rumor spread in social networks."

ACM SIGMETRICS Performance Evaluation Review 44.3 (2017): 7-14.

Operations Research (MIT) Yongwhan Lim, Asuman Ozdaglar, and Alexander Teytelboym. "A simple model of cascades in networks."

Mimeo. 2015.

Computer Vision (Stanford) Li-Jia Li, Hao Su, Yongwhan Lim, and Li Fei-Fei.
"Object Bank: An Object-Level Image Representation for High-Level Visual Recognition."
International Journal of Computer Vision (IJCV). 2013.

Computer Vision (Stanford) Li-Jia Li, Hao Su, Yongwhan Lim, and Li Fei-Fei.

"Objects as Attributes for Scene Classification."

First International Workshop on Parts and Attributes.

European Conference on Computer Vision (ECCV). 2010.

Computer Vision (Stanford) Li-Jia Li, Chong Wang, Yongwhan Lim, David Blei and Li Fei-Fei. "Building and Using a Semantivisual Image Hierarchy." IEEE Computer Vision and Pattern Recognition (CVPR). 2010.

Mathematics (Stanford) Yongwhan Lim. "Symmetry Groups of Platonic Solids."

Mimeo. 2008.

## Research Experience

Optimization & Network Game Theory (Asuman Ozdaglar, MIT)

Markov Chain & Mixing Time Analysis (Persi Diaconis, Stanford)

Winter 2010 - Fall 2012

Stanford Computer Vision Lab (Fei-Fei Li, Stanford)

Fall 2009 - Fall 2011

Analytic Number Theory (Kannan Soundararajan, Stanford)

Fall 2008 - Summer 2009

## Scholarships and Awards

**Kwanjeong Scholarship** – Received a major scholarship from Korea in 2013.

ACM-ICPC Pacific Northwest Regional Contest – Ranked 7th in 2012, 9th in 2011;

Google Code Jam - Advanced to 2012 Online Round 2 (Top 3000).

Facebook Hacker Cup — Advanced to 2011 Online Final. Won t-shirt in 2015 (Top 500); 2020. TopCoder Open — Won t-shirt by solving a problem in 2019 Round 3 (Top 400).

Mathematical Contest in Modeling – Won 2009 Meritorious Prize.

Putnam Mathematics Competition – Won 2008 Highbridge Book Awards (Top 65 at Stanford). Michigan Mathematics Prize Competition – Ranked 2<sup>nd</sup> (Gold Award) out of 9.3K+ in 2007.