Yongwhan Lim

Contact Information

605 W 42nd St Ph 4S
New York, NY 10036
(650) 353−6748

https://cs.columbia.edu/~yongwhan
Citations: 562+
yongwoods@gmail.com; yongwhan@columbia.edu

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*

M.S. Computer Science (AI Track)
B.S. Honors Computer Science (AI Track) and Mathematics
Advisors: Fei-Fei Li and Persi Diaconis

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 *7/11/2022 –*
Senior Quantitative Software Engineer (Derivative Modeling Engineering)

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 Group *Fall 2013 – Fall 2015*

Software Development Engineer Intern (Microsoft) *Summer 2012*

Research Assistant (Stanford) Computer Vision Lab *Fall 2009 – Fall 2011*

Teaching Experience

Top 2 out of 972 instructors at Columbia University based on 30 reviews from https://www.ratemyprofessors.com.

Fall 2022

Associate in CS (Columbia)

Technical Interview Preparation in C++ (COMS 4995-7)

Competitive Programming (COMS 4995-8)

Summer 2022

Lecturer (MIT)

Develop MITx MicroMasters working with Professors Madry, Parrilo, and Ozdaglar.

Guest Lecturer (Harvard math) Introduction to Mathematical Research

Spring 2022 (link)

Associate in CS (Columbia) Technical Interview Preparation in C++ (COMS 4995-13)

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

Selected Testimonials

"Professor Lim is one of the best teachers I have had in Columbia. [...]"

"This course is amazing! Super helpful to prepare for interviews [...]"

"This class is my favorite at Columbia and I hope other students get to experience it too!"

"He is a beast!"

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)

Guest Speaker (CMU Silicon Valley) Interview Preparation Workshop

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)

Guest Speaker (CMU Silicon Valley) Interview Preparation Workshop

Fall 2020

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

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

Guest Speaker (CMU Silicon Valley) Strategies for Software Industry Career (49-794)

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

Coaching Experience

Judge International Collegiate Programming Contest (ICPC) Mid-Central Regional *6/2022 –*

Judge ICPC Greater New York Regional *6/2022 –*

Problemsetter ICPC North America Qualifiers *6/2022 –*

Head Coach Columbia ICPC teams *2/2022 –*

- 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*
- 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 qualified to 2022 ICPC World Finals, to be held in 11/2023. *5/30/2022*

Mentoring Experience

Columbia University *Spring 2022 –*

Undergraduate Students

Chloe Ho (Barnard CS BA '24)
Andrew Mihailoff (SEAS CS BS '24)
Ian Dorian Macleod (SEAS CS BS '23; Summer 2022 Internship at Amazon)
Je Seung You (GS CS BA '21 + SEAS MS '23; Summer 2022 Internship at BAXUS)
Wenqing Zhong (SEAS CS BS '22 + MS '23; Summer 2022 Internship at Tapad)
Andrew Sirenko (SEAS CS BS '23; Summer 2022 Internship at Amazon)
Olivia Zhang (SEAS CS BS '22; Full-time at Goldman Sachs)
Andreas Cheng (GS CS BA '22; Full-time at IXL Learning)
Anais Lawson (SEAS CS BS '23; Summer 2022 Internship at Microsoft)
Yealin Park (SEAS CS BS '23)

Graduate Students

Zhen Lei (SEAS CS MS '22; Full-time at Amazon)
Zhihao Jiang (SEAS CS MS '22; Full-time at Amazon)
Jinsen Wu (SEAS CS MS '22; Summer 2022 Internship at Apple)
Ziwei Han (SEAS CS MS '22; Summer 2022 Internship at Spectral MD)

Résumé Critiques

25+ résumés

45-Minute Mock Interviews

10+ sessions

Community Service *4/2019 –*

- Soyeon Wang (San Jose State University CS BS '21; Full-time at Amazon) *4/2019 – 12/2020*
- Ji Maan Kim (Cal Poly EE BS '18; Full-time at QuantumScape) *4/2019 – 12/2020*
- Bolim Lee (TBD) *3/2022 –*

Invited Talks

KAIST: Special Workshop on Technical Interview *7/13/2022 – 7/14/2022*

Michigan Math and Science Scholars: "CS is a dream come true!" *7/7/2022*

Emerging Scholars Program Columbia Research Symposium: "CS is a dream come true!" *4/22/2022*

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) *Fall 2013 – Fall 2016*

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).

LeetCode – 480^{th} out of 125.0K+ users on September 2020.
CodeChef – 1008^{th} out of 263.5K+ users on September 2020.
CodeForces – 2607^{th} out of 101.8K+ active users on September 2020.
AtCoder – 2671^{th} out of 61.5K+ active users on September 2020.

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^{nd} (Gold Award) out of 9.3K+ in 2007.

Leadership Experience

East-Coast President (Kwanjeong Scholarship) *Academic Year 2013*
Organized the annual meeting for the recipients of scholarship in the east coast of USA.

Social Chair/Webmaster (Stanford) Symphony Orchestra *Academic Year 2010 & 2011*

Vice-President (Stanford) Mathematics Organization. *Academic Year 2009*

Webmaster/Historian Director (Stanford) Korean Student Association. *Academic Year 2009*

Community Service

USA Computing Olympiad (USACO) *6/2022 –*
Problem setter/tester; Analysis writer; Community outreach;

Discord Channel Owner *3/2022 –*
Problem Solving Warriors: 155 members and growing!
Hedge Funds Warriors: 80 members and growing!
ICPC Training Warriors: 67 members and growing!
Hell's Kitchen Home Games: 22 members and growing!

Stanford University Outreach Volunteer Alumni Link Interviewer *1/2022 –*
Volunteered to conduct 20+ alumni interviews in NY, NJ, and MA chapters.

Tech Lead (Google Kick Start Practice Rounds) *10/2020 – 11/2021*
Selected 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 – 2022*
Volunteered to conduct 55+ interviews at Google.

Software Engineer Intern Co-Host (Google) *Summer 2018*
Met weekly with the intern to give guidance on the project.

Software Engineer Instructor (New Community Baptist Church) *4/2019 – 12/2020*
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 – 1/2021*
Created 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.