Hanmin Li

About Me

Place and Date of Birth:	Anhui, China | 31 July 1999
Address:	Exploration Avenue, KAUST, 23955, Thuwal, Saudi Arabia
email:	hanmin.li AT kaust.edu.sa

Education

Present — Ph.D. student in Computer Science
King Abdullah University of Science and Technology, Thuwal, Saudi Arabia
Supervisor: Prof. Peter Richtárik

December 2022 — Master of Engineering in Computer Science
King Abdullah University of Science and Technology, Thuwal, Saudi Arabia
Major: Computer Science
Department: Computer, Electrical and Mathematical Sciences and Engineering
Gpa: 3.86/4.00

July 2021 — Bachelor of Engineering in Computer Science and Technology
University of Science and Technology of China (USTC), Hefei, Anhui, China
Major: Computer Science and Technology
Department: School of Gifted Young
Gpa: 3.64/4.30

August 2018 — Summer School Student
University of Texas at Austin, Austin, Texas
Major: Computer Science (Software Engineering)

Publications

Preprint — "The Power of Extrapolation in Federated Learning"
Hanmin Li, Kirill Acharya, and Peter Richtárik.
arXiv preprint arXiv:2405.13766 May, 2024.

Preprint — "Variance Reduced Distributed Non-Convex Optimization Using Matrix Stepsizes"
Hanmin Li, Avetik Karagulyan, and Peter Richtárik.
arXiv preprint arXiv:2310.04614 Oct, 2023.

Conference — "Det-CGD: Compressed Gradient Descent with Matrix Stepsizes for Non-Convex Optimization." **Hanmin Li**, Avetik Karagulyan, and Peter Richtárik.
International Conference on Learning Representations 2024.

Journal — "SD^2: spatially resolved transcriptomics deconvolution through integration of dropout and spatial information." Haoyang Li, **Hanmin Li**, Juexiao Zhou, Xin Gao.
Bioinformatics, 38(21), pp.4878-4884. September, 2022.

Invited Talks

7 May 2024, Vienna, Austria	International Conference on Learning Representations, Poster "Det-CGD: Compressed Gradient Descent with Matrix Stepsizes for Non-Convex Optimization".
26 June 2024, Lund, Sweden	EURO working group on Continuous Optimization "Compressed Gradient Descent with Matrix Stepsizes for Non-Convex Optimization".

Review Services

Name	Number of paper
IEEE Transactions on Signal Processing	2
Neural Information Processing Systems	6

Work Experience

Jan 2021 - June 2021	Research Intern at QULAB/USTC Supervised by Prof. Kun Qu
Sept 2019 - March 2019	Research Intern at USTC Supervised by Prof. Yongkun Li

Scholarships and Certificates

Sept. 2023	Marked as "outstanding" in the Ph.D. student yearly evaluation by my advisor Prof. Peter Richtárik. KAUST
Sept. 2019	Scholarship for outstanding students (top % 20 students) School of Gifted Young, USTC
Sept. 2018	Scholarship for outstanding students (top % 20 students) School of Gifted Young, USTC
Sept. 2017	Scholarship for Shitsan Pai class of talented students, (top % 10 students) **University of Science and Technology of China**
September 2019	TOEFL©: 110 (Reading:30; Listening:30; Speaking:23; Writing:27)
February 2018	GRE©: 333 (Verbal:163; Quantitative:170; AW:3,5)

Languages

Chinese:	Mothertongue
English:	Fluent

Computer Skills

Proficient	C++, Python, PyTorch, R, Linux.
Intermediate	Java, Verilog, Javascript, Vue