

Hanmin Li

ABOUT ME

PLACE AND DATE OF BIRTH: Anhui, China | 31 July 1999
ADDRESS: Exploration Avenue, KAUST, 23955, Thuwal, Saudi Arabia
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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 AND PREPRINTS

- PREPRINT “On the Convergence of FedProx with Extrapolation and Inexact Prox”
Hanmin Li and Peter Richtárik.
[arXiv preprint arXiv:2410.01410](#) OCT, 2024.
- CONFERENCE “The Power of Extrapolation in Federated Learning”
Hanmin Li, Kirill Acharya, and Peter Richtárik.
[Conference on Neural Information Processing Systems, 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 “SD²: 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

Reviewer: NeurIPS 24', NeurIPS OPT 24', ICLR 25', IEEE Transactions on Signal Processing, Journal of Machine Learning Research.

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

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|----------------|---|
| SEPT. 2024 | Marked as "outstanding" in the Ph.D. student yearly evaluation by my advisor Prof. Peter Richtárik. KAUST |
| 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.