Fanjiang Ye

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Education

Indiana University 2023-expected 2028
Ph.D. Student in Intelligent Systems Engineering (Track: Computer Engineering) Bloomington, IN, USA
Advisor: Dr. Dingwen Tao, Dr. Fengguang Song

University of Science and Technology of China 2019-2023
Bachelor of Science in Physics Hefei, Anhui, China
Advisor: Dr. Changling Zou

Research Experience

Indiana University, HiPDAC Laboratory 2023 - Present
Graduate Research Assistant Bloomington, IN, USA

Hong Kong University of Science and Technology, JÄCK Laboratory 06/2022 - 10/2022
Undergraduate Research Intern Kowloon, Hong Kong

University of Science and Technology of China, Zou Laboratory 2020 - 2023
Undergraduate Research Assistant Hefei, Anhui, China

Honors and Awards

- *Outstanding Student Scholarship (Top 25%).* University of Science and Technology of China 2020-2022

Publication

[1] **Accelerating Communication in DLRM Training with Dual-Level Adaptive Lossy Compression.**
Hao Feng, Boyuan Zhang, **Fanjiang Ye**, Min Si, Ching-Hsiang Chu, Jiannan Tian, Chunxing yin, Zhaoxia Deng, Yuchen Hao, Pavan Balaji, Tong Geng, and Dingwen Tao.
Supercomputing Conference 2024, Atlanta, GA, United States, November 17–22 2024. [Paper]

[2] **FastCLIP: A Suite of Optimization Techniques to Accelerate CLIP Training with Limited Resources.**
Xiyuan Wei, **Fanjiang Ye**, Ori Yonay, Xingyu Chen, Baixi Sun, Dingwen Tao, Tianbao Yang.
Submitted to NeurIPS 2024, Vancouver, Canada, December 9-15 2024. [Paper]

[3] **Memory Efficient High-performance Quantum Phase Estimation on CPUs and GPUs.**
Fanjiang Ye, Boyuan Zhang, Chris Kang, Bo Fang, Dingwen Tao
Submitted to International Parallel & Distributed Processing Symposium 2025, Milan, Italy, June 3-7, 2025.

[4] **Break Memory Limits in Quantum Circuit Simulation with High-fidelity Compression System.**
Boyuan Zhang, Bo Fang, **Fanjiang Ye**, Yida Gu, Meng Wang, Tallent Nathan, Guangming Tan, Dingwen Tao.
Submitted to ASPLOS 2025, Rotterdam, The Netherlands, March 30-April 3, 2025.

[5] **ViSemZ: High-performance Visual Semantics Compression for AI-Driven Science.**
Boyuan Zhang, Luanzheng Guo, Jiannan Tian, Jinyang Liu, Daoce Wang, **Fanjiang Ye**, Chengming Zhang, Jan Strube, Nathan R. Tallent, Guangming Tan, Dingwen Tao.
Submitted to PPoPP 2025, Las Vegas, NV, United States, March 1-5, 2025.