

Fanjiang Ye

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Education

Indiana University

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

University of Science and Technology of China

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

Research Experience

Indiana University, HiPDAC Laboratory

Graduate Research Assistant 2023 - Present
Bloomington, IN, USA

Hong Kong University of Science and Technology, JÄCK Laboratory

Undergraduate Research Intern 06/2022 - 10/2022
Kowloon, Hong Kong

University of Science and Technology of China, Zou Laboratory

Undergraduate Research Assistant 2020 - 2023
Hefei, Anhui, China

Research Interests

- Quantum computation
- System optimization for LLM
- Data compression in HPC application

Honors and Awards

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

Publication

[Ongoing] **Memory Efficient High-performance Quantum Phase Estimation on CPUs and GPUs.**

Fanjiang Ye, Boyuan Zhang, Chris Kang, Bo Fang, Dingwen Tao

[SC'2024] **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. [\[Paper\]](#)

[Preprint] **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. [\[Paper\]](#)

[Preprint] **Overcoming Memory Constraints in Quantum Simulation with a High-Fidelity Compression Framework.**

Boyuan Zhang, **Fanjiang Ye**, Yida Gu, Meng Wang, Tallent Nathan, Guangming Tan, Bo Fang, Dingwen Tao. [\[Paper\]](#)

[PPoPP'25 Poster] **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.