

# Fanjiang Ye

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## *Education*

### **Indiana University**

Ph.D. Student in Intelligent Systems Engineering (Track: Computer Engineering) 2023-expected 2028  
Bloomington, IN, USA

Advisor: Dr. Dingwen Tao, Dr. Fengguang Song

### **University of Science and Technology of China**

Bachelor of Science in Physics

2019-2023

Advisor: Dr. Changling Zou

Hefei, Anhui, China

## *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*

- System optimization for LLM
- System acceleration for quantum computing
- Data compression

## *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.