Fanjiang Ye

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Education

Indiana University | 2023-Present
Ph.D. Student in Computer Engineering (3.713/4.0) | Bloomington, IN, USA
Advisor: Dr. Fengguang Song, Dr. Dingwen Tao
University of Science and Technology of China | 2019-2023
Bachelor of Science in Physics (3.51/4.3) | 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

Research Interests

- Efficient system on generative AI
- System optimization on Multimodal LLM
- Data compression in HPC application

Honors and Awards

- *Indiana University Travel Awards ($1500).* Indiana University Bloomington | 2024
- *USTC Fellowship ($2000).* University of Science and Technology of China | 2023
- *Outstanding Student Scholarship (Top 25%).* University of Science and Technology of China | 2020-2022

Publication

[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. [Paper]