Xinchen Wan

EDUCATION

Hong Kong University of Science and Technology, Hong Kong SAR, China

2018 – present

Ph.D. Candidate, Computer Science and Engineering

Advisor: Prof. Kai Chen

Huazhong University of Science and Technology, Hubei, China

2014 - 2018

Bachelor of Engineering, Computer Science and Technology

Advisor: Prof. Song Wu

INDUSTRIAL EXPERIENCES

ByteDance, Beijing, China

Nov 2021 – present

Research Intern, Hardware Acceleration Group

• Work with Dr. Layong Luo. Design MINC Platform, a generic platform to support diverse message-level in-network computing applications over diverse special hardware.

Clustar, Beijing, China

Jan 2018 – Jun 2018

Research Intern, Machine learning Platform Group

• Worked with Mr. Bairen Yi. Designed and implemented scripts to automatically deploy TensorFlow equipped with GPU direct RDMA over a private cloud.

PUBLICATIONS

Zilong Wang, Layong Luo, Qingsong Ning, Chaoliang Zeng, Wenxue Li, **Xinchen Wan**, Peng Xie, Tao Feng, Ke Cheng, Xiongfei Geng, Tianhao Wang, Weicheng Ling, Kejia Huo, Pingbo An, Kui Ji, Shideng Zhang, Bin Xu, Ruiqing Feng, Tao Ding, Kai Chen, and Chuanxiong Guo (2023). "SRNIC: A scalable architecture for RDMA NICs". In: *Proc. NSDI*. USENIX.

Zilong Wang, **Xinchen Wan**, Chaoliang Zeng, and Kai Chen (2023). "Accurate and Scalable Rate Limiter for RDMA NICs". In: *Proc. APNet*. ACM.

Xinchen Wan, Kaiqiang Xu, Xudong Liao, Yilun Jin, Kai Chen, and Xin Jin (2023). "Scalable and Efficient Full-Graph GNN Training for Large Graphs". In: *Proc. SIGMOD*. ACM.

Xinchen Wan, Kai Chen, and Yiming Zhang (2022). "DGS: Communication-Efficient Graph Sampling for Distributed GNN Training". In: *Proc. ICNP*. IEEE.

Kaiqiang Xu, **Xinchen Wan**, Hao Wang, Zhenghang Ren, Xudong Liao, Decang Sun, Chaoliang Zeng, and Kai Chen (2021). "Tacc: A full-stack cloud computing infrastructure for machine learning tasks". In: *arXiv*.

Hao Wang, Jingrong Chen, **Xinchen Wan**, Han Tian, Jiacheng Xia, Gaoxiong Zeng, Weiyan Wang, Kai Chen, Wei Bai, and Junchen Jiang (2020). "Domain-specific communication optimization for distributed DNN training". In: *arXiv*.

Xinchen Wan, Hong Zhang, Hao Wang, Shuihai Hu, Junxue Zhang, and Kai Chen (2020). "Rat-resilient allreduce tree for distributed machine learning". In: *Proc. APNet*. ACM.

TALKS

- [1] DGS: Communication-Efficient Graph Sampling for Distributed GNN Training ICNP'22, Online, Nov 2022
- [2] Rat-resilient allreduce tree for distributed DNN training APNet'20, Online, Aug 2020

TEACHING

Teaching Assistant Coordinator at HKUST CSE	Fall 2019–Spring 2021
Teaching Assistant of COMP1022Q at HKUST	Spring 2019

AWARDS

Research Postgraduate Scholarship, HKUST	2018 – present
Chinese National Scholarship, Ministry of Education	2017
Learning Excellence Scholarship (Top 2 students in CS department), HUST	2016
Outstanding Student Cadres Scholarship, HUST	2015

SKILLS

Programming C/C++, Python, Go, C#

Language Chinese (native), English (professional working proficiency)

Last updated: June 5, 2023