

ZIYUE LUO

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EDUCATION

Ph.D., Computer Science

The University of Hong Kong, Hong Kong
Supervisor: Prof. Chuan Wu

September 2018 - September 2022

B.E., Computer Science and Technology

Hongyixuetang Class, Wuhan University, China

September 2014 - June 2018

EMPLOYMENT

Postdoctoral Researcher

Dept. of Electrical and Computer Engineering,
The Ohio State University, US

December 2022 - present

Research Intern

Platform for AI (PAI),
Alibaba Group, China

July 2019 - September 2020

PRIZES AND AWARDS

- | | |
|--|-------------|
| ▷ INFOCOM Student Conference Grant | <i>2022</i> |
| ▷ HKU Foundation Postgraduate Fellowship | <i>2018</i> |
| ▷ Third-Class Scholarship for Outstanding Students | <i>2016</i> |
| ▷ National Scholarship | <i>2015</i> |
| ▷ First-Class Scholarship for Outstanding Students | <i>2015</i> |

TEACHING

At the University of Hong Kong:

- | | |
|---|-------------|
| ▷ COMP7404B Computational intelligence and machine learning | <i>2019</i> |
| ▷ ENGG1330 Computer programming I | <i>2018</i> |

PUBLICATIONS

Ziyue Luo, Yixin Bao, Chuan Wu. “Optimizing Task Placement and Online Scheduling for Distributed GNN Training Acceleration in Heterogeneous Systems,” in IEEE/ACM Transactions on Networking, vol. 32, no. 5, pp. 3715 - 3729, October 2024.

Ye Tian, Zhen Jia, **Ziyue Luo**, Yida Wang, Chuan Wu. “DiffusionPipe: Training Large Diffusion Models with Efficient Pipelines,” in the Seventh Conference on Machine Learning and Systems (MLSys), Santa Clara, USA, May 13 - 16, 2024.

Bingqian Du, Jun Liu, **Ziyue Luo**, Chuan Wu, Qiankun Zhang, Hai Jin. “Expediting Distributed GNN Training with Feature-only Partition and Optimized Communication Planning,” in IEEE INFOCOM, Vancouver, Canada, May 20-23, 2024.

Zhe Zhang, **Ziyue Luo**, Chuan Wu. “Two-level Graph Caching for Expediting Distributed GNN Training,” in IEEE INFOCOM, New York, USA, May 17-20, 2023.

Ziyue Luo, Yixin Bao, Chuan Wu. “Optimizing Task Placement and Online Scheduling for Distributed GNN Training Acceleration,” in IEEE INFOCOM, online, May 2-5, 2022.

Ziyue Luo, Xiaodong Yi, Guoping Long, Shiqing Fan, Chuan Wu, Wei Lin. “Efficient Pipeline Planning for Expedited Distributed DNN Training,” in IEEE INFOCOM, online, May 2-5, 2022.

Jingyan Jiang, **Ziyue Luo**, Chenghao Hu, Zhaoliang He, Zhi Wang, Shutao Xia, Chuan Wu. “Joint Model and Data Adaptation for Cloud Inference Serving,” in the 42th IEEE Real-time Systems Symposium (RTSS), Dortmund, Germany, December 7-10, 2021.

Xiaodong Yi, **Ziyue Luo**, Chen Meng, Mengdi Wang, Guoping Long, Chuan Wu, Jun Yang, Wei Lin. “Fast Training of Deep Learning Models over Multiple GPUs,” in ACM/IFIP Middleware, Delft, The Netherlands, December 7-11, 2020.

Xiaodong Yi, Shiwei Zhang, **Ziyue Luo**, Guoping Long, Lansong Diao, Chuan Wu, Zhen Zheng, Jun Yang, Wei Lin. “Optimizing Distributed Training Deployment in Heterogeneous GPU Clusters,” in ACM CoNEXT, Barcelona, Spain, December 1-4, 2020.

Ziyue Luo, Chuan Wu. “An Online Algorithm for VNF Service Chain Scaling in Datacenters,” in IEEE/ACM Transactions on Networking, vol. 28, No. 3, pp. 1061- 1073, June 2020.

Ziyue Luo, Chuan Wu, Zongpeng Li, Wei Zhou. “Scaling Geo-distributed Network Function Chains: A Prediction and Learning Framework,” in IEEE Journal on Selected Areas in Communications (JSAC) Special issue on Network Softwarization & Enablers, vol. 37, no. 8, pp. 1838 - 1850, August 2019.

Ziyue Luo, Zongpeng Li, Chuan Wu. “Online Cloud Resource Allocation and Pricing with Server Speed Scaling,” in IEEE ICC 2018, Kansas City, MO, USA, May 20-24, 2018.