ZHAOMIN WU

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EDUCATION

National University of Singapore (NUS), Singapore 07/2019 - 05/2024
Doctor of Philosophy – Computer Science Advisor: Prof. Bingsheng He

Huazhong University of Science and Technology (HUST), China 09/2015 - 06/2019
Bachelor of Engineering – ACM class, Computer Science and Technology GPA: 3.91/4.0, Rank: 10/281

EMPLOYMENT

Research Fellow, National University of Singapore (NUS), Singapore 05/2024 - Present

PUBLICATIONS

[ArXiv 2025] Vertical Federated Learning in Practice: The Good, the Bad, and the Ugly
Zhaomin Wu, Zhen Qin, Junyi Hou, Haodong Zhao, Qinbin Li, Bingsheng He, Lixin Fan

[ArXiv 2025] Learning Relational Tabular Data without Shared Features
Zhaomin Wu, Shida Wang, Ziyang Wang, Bingsheng He

[ArXiv 2024] Model-Based Privacy-Preserving Knowledge Transfer for Large Language Models
Zhaomin Wu*, Jizhou Guo*, Junyi Hou, Bingsheng He, Lixin Fan, Qiang Yang

[ArXiv 2024] Federated Data-Efficient Instruction Tuning for Large Language Models
Zhen Qin, Zhaomin Wu, Bingsheng He, Shuiguang Deng

[ArXiv 2024] Personalized Federated Fine-Tuning for LLMs via Data-Driven Heterogeneous Model Architectures
Yicheng Zhang, Zhen Qin, Zhaomin Wu, Shuiguang Deng

[NeurIPS 2024] Federated Transformer: Multi-Party Vertical Federated Learning on Practical Fuzzily Linked Data
Zhaomin Wu, Junyi Hou, Yiqun Diao, Bingsheng He

[ICLR 2024] VertiBench: Advancing Feature Distribution Diversity in Vertical Federated Learning Benchmarks
Zhaomin Wu, Junyi Hou, Bingsheng He

[SIGMOD 2023] DeltaBoost: Gradient Boosting Decision Trees with Efficient Machine Unlearning
Zhaomin Wu, Junhui Zhu, Qinbin Li, Bingsheng He *(Honorable Mention for Best Artifact)*

[MLSys 2023] FedTree: A Federated Learning System for Trees
Qinbin Li, Zhaomin Wu, Yanzheng Cai, Yuxuan Han, Ching Man Yung, Tianyuan Fu, Bingsheng He

[NeurIPS 2022] A Coupled Design of Exploiting Record Similarity for Practical Vertical Federated Learning

*Equal contribution.

Zhaomin Wu, Qinbin Li, Bingsheng He

[TBD 2022] Practical Vertical Federated Learning with Unsupervised Representation Learning
Zhaomin Wu, Qinbin Li, Bingsheng He

[TKDE 2022] A Survey on Federated Learning Systems: Vision, Hype and Reality for Data Privacy and Protection
Qinbin Li, Zeyi Wen, Zhaomin Wu, Sixu Hu, Naibo Wang, Yuan Li, Xu Liu, Bingsheng He

[TIST 2021] The Oarf Benchmark Suite: Characterization and Implications for Federated Learning Systems
Sixu Hu, Yuan Li, Xu Liu, Qinbin Li, Zhaomin Wu, Bingsheng He

[AAAI 2020] Privacy-Preserving Gradient Boosting Decision Trees
Qinbin Li, Zhaomin Wu, Zeyi Wen, Bingsheng He

HONORS AND AWARDS

Best Research Staff Award (Top 2 in NUS Institute of Data Science)	2025
Honorable Mention for PhD Thesis Award (Top 5 in NUS School of Computing)	2024
SIGMOD Honorable Mention for Best Artifact (Top 3 worldwide)	2023
Dean's Graduate Research Excellence Award (Top 10 in NUS School of Computing)	2023
Outstanding Undergraduate Thesis (Top 5% in HUST)	2019
Meritorious Winner in Mathematical Contest in Modeling (Top 10% worldwide)	2018
National Scholarship (Top 1% in HUST)	2017
Outstanding Students (Top 1% in HUST)	2016
Merit Student (Top 5% in HUST)	2016

PROFESSIONAL SERVICES

Conference Reviewer, ICML, NeurIPS	2025
Conference Reviewer, ICLR, NeurIPS, KDD, WWW, AISTATS	2024
Conference Reviewer, NeurIPS, SIGMOD (Artifact)	2023
Conference Reviewer, PAKDD	2022
Conference Reviewer, PAKDD	2021
Journal Reviewer, TKDD, JPDC, TNNLS	2024
Journal Reviewer, TPAMI, TKDE, TNNLS, IJCV, IoT-J	2023
Journal Reviewer, TPDS, TIST	2022
Tutorial Speaker, IJCAI	2020

TEACHING

Teaching Assistant

Introduction to Operating Systems (CS2106)	Fall 2022
Software Testing (CS4218)	Spring 2022
Neural Networks and Deep Learning (CS5242)	Fall 2021
Programming Methodology (II) (CS2030)	Spring 2021

Big Data Systems for Data Science (CS4225)	Fall 2020
Data Structures and Algorithms (CS2040S)	Spring 2020
Programming Methodology (CS1010E)	Fall 2019

SKILLS

Familiar Programming Languages
Python, C, C++

Utilized Programming Languages
Java, Verilog, MATLAB, x86 Assembly, Standard ML, SQL, JavaScript, CUDA

Familiar Tools
PyTorch, Linux Command Line, Latex, Word, Excel, PowerPoint

Utilized Tools
JavaFX, Win32 API, Qt, LightGBM, XGBoost, TensorFlow, Apache Cassandra, MongoDB

Languages
Chinese (native), English (capable of professional working)