Zhaomin Wu

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EXPERIENCE

Research Fellow, National University of Singapore (NUS), Singapore

05/2024 - Present

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

PUBLICATIONS

VertiBench: advancing feature distribution diversity in vertical federated learning benchmarks (ICLR 24)

Zhaomin Wu, Junyi Hou, Bingsheng He

DeltaBoost: gradient boosting decision trees with efficient machine unlearning (SIGMOD 23)

Zhaomin Wu, Junhui Zhu, Qinbin Li, Bingsheng He

(Honorable Mention for Best Artifact)

A coupled design of exploiting record similarity for practical vertical federated learning (NeurIPS 22)

Zhaomin Wu, Qinbin Li, Bingsheng He

Practical vertical federated learning with unsupervised representation learning (IEEE Trans. Big Data 22)

Zhaomin Wu, Qinbin Li, Bingsheng He

FedTree: a federated learning system for trees (MLSys 23)

Qinbin Li, Zhaomin Wu, Yanzheng Cai, Yuxuan Han, Ching Man Yung, Tianyuan Fu, Bingsheng He

A survey on federated learning systems: vision, hype and reality for data privacy and protection (TKDE 22)

Qinbin Li, Zeyi Wen, Zhaomin Wu, Sixu Hu, Naibo Wang, Yuan Li, Xu Liu, Bingsheng He

The oarf benchmark suite: characterization and implications for federated learning systems (TIST 21)

Sixu Hu, Yuan Li, Xu Liu, Qinbin Li, Zhaomin Wu, Bingsheng He

Privacy-preserving gradient boosting decision trees (AAAI 20)

Qinbin Li, Zhaomin Wu, Zeyi Wen, Bingsheng He

HONORS AND AWARDS

- Honorable Mention for Best Artifact Award, 2023 Top 3 in SIGMOD 2023
- Honorable Mention for PhD Thesis Award, 2024 Top 5 in School of Computing, NUS
- Dean's Graduate Research Excellence Award, 2023 School of Computing, NUS
- Outstanding Students, 2016 Top 1% in HUST
- National Scholarship, 2017 Top 1% in HUST
- Merit Student, 2016 Top 5% in HUST
- Outstanding Undergraduate Thesis, 2019 Top 5% in HUST
- Meritorious Winner in Mathematical Contest in Modeling, 2018 Top 10% worldwide
- Third Prize in National College Students Connected Smarter System Innovation Competition, 2016 China

TECHNICAL SKILLS

Familiar Programming Languages: Python, C, C++, Java

Utilized Programming Languages: 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)

LEADERSHIP & SERVICE

Journal Reviewer of TPAMI, TKDE, TNNLS, IJCV, TPDS, TIST, IoTJ, TCSVT	2021 - 2024
Conference Reviewer of NeurIPS, KDD, PAKDD	2021 - 2024
Tutorial Speaker of International Joint Conference on Artificial Intelligence (IJCAI)	2020
System administrator of GPU servers in NUS Xtra lab	2021 - 2024