

# ZHAOMIN WU

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## EDUCATION

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<b>National University of Singapore (NUS), Singapore</b>	07/2019 - 05/2024
Doctor of Philosophy – Computer Science	Advisor: Prof. Bingsheng He
<b>Huazhong University of Science and Technology (HUST), China</b>	09/2015 - 06/2019
Bachelor of Engineering – ACM class, Computer Science and Technology	GPA: 3.91/4.0, Rank: 10/281

## EMPLOYMENT

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<b>Research Fellow</b> , National University of Singapore (NUS), Singapore	05/2024 - Present
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## PUBLICATIONS

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[ArXiv 2024] **Model-Based Differentially Private Knowledge Transfer for Large Language Models**  
Zhaomin Wu<sup>\*</sup>, Jizhou Guo<sup>\*</sup>, 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

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

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

[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**  
Zhaomin Wu, Qinbin Li, Bingsheng He

[IEEE Trans. Big Data 2022] **Practical Vertical Federated Learning with Unsupervised Representation Learning**  
Zhaomin Wu, Qinbin Li, Bingsheng He

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<sup>\*</sup>Equal contribution.

[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

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

## PROFESSIONAL SERVICES

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

## TEACHING

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<b>Teaching Assistant</b>	
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

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**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)