

Zekai Wang

Ph.D. student in EECS
Massachusetts Institute of Technology

wzekai99@gmail.com
<https://zekai.site>

EDUCATION

- 2024.9– **Ph.D. in Computer Science**, MIT, US; Supervisor: Ashia Wilson
2021.9–2024.6 **M.S. in Computer Science**, Wuhan University, China; Supervisor: Weiwei Liu
2017.9–2021.6 **B.S. in Computer Science, Rank: 13/339(3.9%)**, Wuhan University, China

EXPERIENCE

- 2025.5–2025.8 **Research Intern**, Snowflake, US
2022.9–2023.6 **Research Intern**, Sea AI Lab, Singapore
2020.1–2020.7 **International Exchange**, University of California, Berkeley, US
2019.7–2019.8 **Visiting Student**, National University of Singapore, Singapore

RESEARCH AREAS

Multi-agent system, Trustworthy machine learning, Generative model

PUBLICATIONS

(*: equal contribution)

- 2026 Online Reasoning Calibration: Test-Time Training Enables Generalizable Conformal LLM Reasoning
Cai Zhou*, **Zekai Wang***, Menghua Wu, Qianyu Julie Zhu, Flora C. Shi, Chenyu Wang, Ashia Wilson, Tommi Jaakkola, Stephen Bates
ArXiv preprint ([arXiv:2604.01170](https://arxiv.org/abs/2604.01170))
- 2024 DRF: Improving Certified Robustness via Distributional Robustness Framework
Zekai Wang, Zhengyu Zhou, Weiwei Liu
AAAI Conference on Artificial Intelligence (**AAAI**)
- 2023 RVCL: Evaluating the Robustness of Contrastive Learning via Verification
Zekai Wang, Weiwei Liu
Journal of Machine Learning Research (**JMLR**)
- Better Diffusion Models Further Improve Adversarial Training
Zekai Wang*, Tianyu Pang*, Chao Du, Min Lin, Weiwei Liu, Shuicheng Yan
International Conference on Machine Learning (**ICML**)
- Task Variance Regularized Multi-Task Learning
Yuren Mao, **Zekai Wang**, Weiwei Liu, Xuemin Lin, Wenbin Hu
IEEE Transactions on Knowledge and Data Engineering (**TKDE**)

- 2022 Robustness Verification for Contrastive Learning
Zekai Wang, Weiwei Liu
 International Conference on Machine Learning (**ICML**), **Long Presentation (top 2%)**
- On the Tradeoff Between Robustness and Fairness
 Xinsong Ma, **Zekai Wang**, Weiwei Liu
 Annual Conference on Neural Information Processing Systems (**NeurIPS**)
- MetaWeighting: Learning to Weight Tasks in Multi-Task Learning
 Yuren Mao, **Zekai Wang**, Weiwei Liu, Xuemin Lin, Pengtao Xie
 Findings of Association for Computational Linguistics (**ACL Findings**)
- Deep learning for non-parameterized MEMS structural design
 Ruiqi Guo, Fanping Sui, Wei Yue, **Zekai Wang**, Sedat Pala, Kunying Li, Renxiao Xu, Liwei Lin
 Microsystems & Nanoengineering
- Robustness Verification Framework for Self-supervised Contrastive Learning
Zekai Wang, Weiwei Liu
 ICML Workshop on Formal Verification of Machine Learning (**WFMVML**)
- 2021 BanditMTL: Bandit-based Multi-task Learning for Text Classification
 Yuren Mao, **Zekai Wang**, Weiwei Liu, Xuemin Lin, Wenbin Hu
 Annual Meeting of the Association for Computational Linguistics (**ACL**)
- Accelerating Mems Design Process Through Machine Learning from Pixelated Binary Images
 Ruiqi Guo, Renxiao Xu, **Zekai Wang**, Fanping Sui, Liwei Lin
 International Conference on Micro Electro Mechanical Systems (**MEMS**)

GRANTS AND AWARDS

Honors and Scholarships

- 2024 Outstanding Graduate, School of Computer Science & Wuhan University
- 2023 China National Scholarship (**top 1%**)
- 2023 Academic Excellence Scholarship, First Class, Wuhan University
- 2023 Outstanding Graduate Student, Wuhan University
- 2022, 24 Academic Innovation Scholarship, Wuhan University
- 2020 “Daoyu Liu” University President Scholarship, Wuhan University
- 2018–2020 Scholarship of Wuhan University & Advanced Individual

Projects and Competitions

- 2019–2021 Planning Project of Innovation and Entrepreneurship Training of National Undergraduate, Team Leader
- 2020 Chinese Undergraduate IoT Design Competition, Provincial First Prize
- 2018–2020 Chinese Undergraduate Computer Design Contest, National Prize

ACADEMIC SERVICES

Reviewer of TPAMI, IJCV, TNNLS, NeurIPS, ICML, ICLR, AAAI, IJCAI