

Zekai Wang

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EDUCATION

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

2022.9–2023.6 **Research Intern**, Sea AI Lab, Singapore; Mentor: Tianyu Pang, Min Lin
2020.1–2020.7 **International Exchange**, University of California, Berkeley, U.S.A.
2019.7–2019.8 **Visiting Student**, National University of Singapore, Singapore

RESEARCH AREAS

Trustworthy machine learning, Multi-task learning

PUBLICATIONS

First-author Proceedings (*: equal contribution)

2024 RVCL: Evaluating the Robustness of Contrastive Learning via Verification
 Zekai Wang, Weiwei Liu
 Journal of Machine Learning Research (**JMLR**)
 DRF: Improving Certified Robustness via Distributional Robustness Framework
 Zekai Wang, Zhengyu Zhou, Weiwei Liu
 AAAI Conference on Artificial Intelligence (**AAAI**)
2023 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**)
2022 Robustness Verification for Contrastive Learning
 Zekai Wang, Weiwei Liu
 International Conference on Machine Learning (**ICML**), **Long Presentation (top 2%)**

Conference Proceedings

2022 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**)

- 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**)

Journal Proceedings

- 2023 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 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

Workshop Proceedings

- 2022 Robustness Verification Framework for Self-supervised Contrastive Learning
Zekai Wang, Weiwei Liu
ICML Workshop on Formal Verification of Machine Learning (**WVFM**)

GRANTS AND AWARDS

Honors and Scholarships

- 2023 China National Scholarship (**top 1%**)
- 2023 Academic Excellence Scholarship, First Class, Wuhan University
- 2023 Outstanding Graduate Student, Wuhan University
- 2022 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
- 2019, 2020 Chinese Undergraduate Computer Design Contest, National Third Prize
- 2018 Chinese Undergraduate Computer Design Contest, National Second Prize

ACADEMIC SERVICES

Journal Reviewer

IEEE Transactions on Neural Networks and Learning Systems (TNNLS)

Conference Reviewer

NeurIPS (2022, 2023), ICML (2023, 2024), ICLR (2023, 2024), AAAI (2024)