





Renzhi Wang

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Education

- 2022 –  **Ph.D., Electrical and Computer Engineering, University of Alberta**
Advisor: Prof. Lei Ma
Research interest: Safety of Autonomous Driving System and Cyber-Physical System
- 2017 – 2022  **M.Sc. Computer Technology, Xidian University**
Advisor: Prof. Cong Tian
Research interest: The transferability of adversarial example.
- 2012 – 2016  **Bachelor, Process equipment and control engineering., Xian Jiaotong University**

Employment History

- 2020 – 2022  **Intel Software Engineer**
Focused on the performance projection of the GPU with MPI communication. Use existing CPU or GPU, project the performance of the GPU in design.

Research Publications



- **Wang, R.**, Cheng, M., Xie, X., Zhou, Y., & Ma, L. (2025). MoDitector: Module-Directed Testing for Autonomous Driving Systems. ISSTA 2025
- **Wang, R.**, Zhou, Z., Song, J., Xie, X., Xie, X., & Ma, L. (2024). MORTAR: A Model-based Runtime Action Repair Framework for AI-enabled Cyber-Physical Systems.
- **Wang, R.**, Wang, Z., Huang, Y., & Ma, L. (2023, October). When simulator meets natural deviation: A study on deviations in simulation-based ads testing. In 2023 IEEE 34th International Symposium on Software Reliability Engineering Workshops (ISSREW) (pp. 83-88). IEEE.
- Wang, W., Xie, X., Huang, Y., **Wang, R.**, Chen, A. R., & Ma, L. (2025). Fine-grained Testing for Autonomous Driving Software: a Study on Autoware with LLM-driven Unit Testing.
- **Wang, R.**, Zhang, T., Xie, X., Ma, L., Tian, C., Juefei-Xu, F., & Liu, Y. (2020). Generating adversarial examples with controllable non-transferability.

Miscellaneous Experience

Awards and Achievements

- 2020  **Outstanding Graduation Award, 2020 Xidian University**
- 2017, 2018  **First Class Scholarship, Xidian University.**

Competition

- 2021  **3rd place in First Intel AI Challenge, Technical Support Text Classification task.**
- 2019  **3rd place in IJCAI-19 Alibaba Adversarial AI Challenge.**