

SIMIN LI

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English: TOEFL 103 | GRE 332+3.5 | IELTS 8

EDUCATION

Beihang University, Computer Science <i>Ph.D. Student. Advisor: Prof. Xianglong Liu. Co-supervised by Prof. Yaodong Yang (Peking University).</i> Sep. 2021-	Beijing, China
Nanyang Technological University, Computer Science <i>Visiting Scholar. Advisor: Prof. Bo An.</i> Jun. 2024-May 2025	Beijing, China
Beihang University, Computer Science <i>Master of Science (Advanced to Ph.D. study). Advisor: Prof. Weifeng Lv.</i> Seq. 2020-Jul. 2021	Beijing, China
Beihang University, Electronic Engineering <i>Bachelor (Summa Cum Laude). Ranked: top 5%.</i> Seq. 2016-Jul. 2020	Beijing, China

RESEARCH

Overview: I am interested in **robust multi-agent reinforcement learning** (MARL). My research interest includes adversarial attack/defense for MARL. Currently, I'm moving forward towards **robust VLA and human friendly RLHF**. In early years, I also work on adversarial attack/defense for computer vision, human-computer interaction, graph neural network and multivariate time series forecasting.

PUBLICATIONS

- **Simin Li**, Ruixiao Xu, Jun Guo, Pu Feng, Jiakai Wang, Aishan Liu, Yaodong Yang, Xianglong Liu. Mutual Information Regularization is Provably Robust for Multi-Agent Reinforcement Learning. **IEEE TNNLS 2025**.
- **Simin Li**, Jun Guo, Jingqiao Xiu, Pu Feng, Xin Yu, Jiakai Wang, Aishan Liu, Wenjun Wu, Xianglong Liu. Attacking Cooperative Multi-Agent Reinforcement Learning by Adversarial Minority Influence. **Neural Networks 2025**.
- **Simin Li**, Jun Guo, Jingqiao Xiu, Xin Yu, Jiakai Wang, Aishan Liu, Yaodong Yang, Xianglong Liu. *Byzantine Robust Cooperative Multi-Agent Reinforcement Learning as a Bayesian Game*. **ICLR 2024**.
- **Simin Li**, Huangxinxin Xu, Jiakai Wang, Aishan Liu, Fazhi He, Xianglong Liu, Dacheng Tao. *Hierarchical Perceptual Noise Injection for Social Media Fingerprint Privacy Protection*. **IEEE TIP 2024**.
- **Simin Li**, Shuning Zhang, Gujun Chen, Dong Wang, Pu Feng, Jiakai Wang, Aishan Liu, Xin Yi, Xianglong Liu. *Towards Benchmarking and Assessing Visual Naturalness of Physical World Adversarial Attacks*. **CVPR 2023**.
- Xin Yu, Rongye Shi, Pu Feng, Yongkai Tian, **Simin Li**, Shuhao Liao, Wenjun Wu. *Leveraging Partial Symmetry for Multi-Agent Reinforcement Learning*. **AAAI 2024**.

SUBMITTED PAPERS

- **Simin Li**, Zihao Mao, Hanxiao Li, et al. Evaluating Robustness and Resilience in Multi-Agent Reinforcement Learning. Submitted to **NeurIPS 2025**.
- **Simin Li**, Yuwei Zheng, Linhao Wang, et al. Vulnerable Agent Identification in Large-Scale Multi-Agent Reinforcement Learning. Submitted to **NeurIPS 2025**.
- Ruixiao Xu, Zhiqian Liu, Zhixia Zhang, **Simin Li***, Yaodong Yang, Xianglong Liu. Adversarial Policy Transfer in Mixed Cooperative-Competitive Games. Submitted to **NeurIPS 2025**.
- Haochong Xia*, **Simin Li***, Ruixiao Xu*, et al. Bayesian Robust Financial Trading with Adversarial Synthetic Market Data. Submitted to **KDD 2025 (Current Status: Resubmit)**.
- **Simin Li**, Yifan Zhong, Jiarong Liu, et al. Robust Multi-Agent Control via Maximum Entropy Heterogeneous-Agent Reinforcement Learning. Submitted to **IEEE TPAMI (Under Review)**

SERVICE

I am a reviewer of ICLR, ICML, NeurIPS, area chair of DAI, program chair of CVPR Art of Robustness workshop.

HONORS

- National Scholarship, 2024.
- Youth Talent Support Program of the China Association for Science and Technology for Doctoral Students (中国科协青年人才托举工程博士生专项计划), 2024.
- State-Sponsored Scholarship for joint PhD students, 2024 (120K RMB).
- Doctoral Research Excellence Academic Fund, 2024 (40K RMB).