# Xilie Xu

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## Education Background

Aug. 2021 - **Ph.D. Candidate**, Department of Computer Science, School of Computing, Present National University of Singapore, Singapore.

Supervised by Prof. Mohan Kankanhalli and co-advised by Dr. Jingfeng Zhang O Research topic: adversarial machine learning [1, 2, 3].

Sep. 2017 - Undergraduate, Taishan College, Shandong University, Jinan, China.

Jun. 2021 Taishan College is an elite program, which is committed to cultivating compound and creative elite students in science and engineering disciplines. The selection of this college is really competitive, admitting only about 15 students of CS major.

## Academic Experience

Jun. 2019 - Research Assistant in Research Center of Software and Data Engi-

Jun. 2021 **neering**, Shandong University, Jinan, China.

Supervised by Prof. Lizhen Cui and Dr. Jingfeng Zhang

• Research topic: adversarial machine learning [4, 5, 6].

Jul. 2019 **NUS School of Computing Summer Workshop 2019**, National University of Singapore, Singapore.

• Project "Save Shanghai: Garbage Classification" was awarded the first prize among about 100 competitive teams in the "Big Data and Cloud Computing" cluster.

# Internship Experience

Jun. 2021 - **Research Intern**, Department of Ant Group-CRO Line-Security and Risk Jul. 2021 Management, Ant Z Space, Hangzhou, China.

Mentored by Dr. Lingjuan Lyu

- Research topic: adversarial machine learning and privacy.
- Proposed an innovative proposal a new method to protect model intellectual property and data privacy by preventing knowledge distillation.

## Award and Grant

- Aug. 2022 **Graduate Student Travel Grant**, 3100 SGD, School of Computing, National University of Singapore.
- Aug. 2022 Research Achievement Award, School of Computing, National University of Singapore.
- Jun. 2022 ICML 2022 Participation Grant, ICML 2022.
- Oct. 2021 Outstanding Reviewer Award, NeurIPS 2021.
- Jun. 2021 Outstanding Undergraduate Thesis Award, Shandong University.

- Sep. 2020 Specialty Scholarship (Research Innovation Award), First Prize, Shandong University.
- Sep. 2020 Outstanding Student Scholarship, Second Prize, Shandong University.
- Sep. 2019 Outstanding Student Scholarship, Third Prize, Shandong University.
- Oct. 2018 First Prize at the 10th Mathematics Competition of Chinese College Student, Chinese Mathematical Society.
- Sep. 2018 Outstanding Student Scholarship, Third Prize, Shandong University.

## — Service

- May. 2023 Serve as a reviewer for NeurIPS 2023.
- Apr. 2023 Create the website of N-CRiPT Technical Workshop 2023 [link] and present a poster at the workshop, National University of Singapore.
- Feb. 2023 Serve as a reviewer for ICML 2023.
- Jan. 2023 Serve as a reviewer for IEEE Transactions on Artificial Intelligence.
- Oct. 2022 Serve as a member of the executive group of TrustML Young Scientist Seminars, RIEKN-AIP, Tokyo.
- Sep. 2022 Serve as a reviewer for ICLR 2023.
- Jun. 2022 Serve as a reviewer for NeurIPS 2022.
- Apr. 2022 Serve as a student reviewing member of the Master of Computing admission, School of Computing, National University of Singapore.
- Mar. 2022 Serve as a reviewer for TMLR.
- Feb. 2022 Serve as a reviewer for ICML 2022.
- Jan. 2022 Serve as a teaching assistant for CS5242 Deep Learning and Neural
- May. 2022 Networks, School of Computing, National University of Singapore.
- Sep. 2021 Serve as a reviewer for ICLR 2022.
- May. 2021 Serve as a reviewer for NeurIPS 2021.

## Research Work

- [1] Xilie Xu, Jingfeng Zhang, Feng Liu, Masashi Sugiyama, and Mohan Kankanhalli. Enhancing adversarial contrastive learning via adversarial invariant regularization. arXiv preprint arXiv:2305.00374, 2023.
- [2] Xilie Xu\*, Jingfeng Zhang\*, Feng Liu, Masashi Sugiyama, and Mohan Kankanhalli. Efficient adversarial contrastive learning via robustness-aware coreset selection. arXiv preprint arXiv:2302.03857, 2023.
- [3] Xilie Xu\*, Jingfeng Zhang\*, Feng Liu, Masashi Sugiyama, and Mohan Kankanhalli. Adversarial attack and defense for non-parametric two-sample tests. In *International Conference on Machine Learning*, pages 24743–24769. PMLR, 2022.
- [4] Jingfeng Zhang\*, Xilie Xu\*, Bo Han, Tongliang Liu, Gang Niu, Lizhen Cui,

- and Masashi Sugiyama. Noilin: Improving adversarial training and correcting stereotype of noisy labels. *Transactions on Machine Learning Research*, 2022.
- [5] Chen Chen\*, Jingfeng Zhang\*, Xilie Xu, Lingjuan Lyu, Chaochao Chen, Tianlei Hu, and Gang Chen. Decision boundary-aware data augmentation for adversarial training. *IEEE Transactions on Dependable and Secure Computing*, 2022.
- [6] Jingfeng Zhang\*, Xilie Xu\*, Bo Han, Gang Niu, Lizhen Cui, Masashi Sugiyama, and Mohan Kankanhalli. Attacks which do not kill training make adversarial learning stronger. In *International Conference on Machine Learning*, pages 11278–11287. PMLR, 2020.

<sup>&</sup>lt;sup>0</sup>An asterisk (\*) beside authors' names indicates equal contributions.