XIAN WANG

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EDUCATION

The Hong Kong University of Science and Technology — Hong Kong S.A.R.
Master of Philosophy in Computer Science and Engineering — Sep. 2023 - Jun. 2025 (expected)
Supervisor: Dr. Dimitris Papadopoulos

Xidian University — Xi'an, China
Bachelor of Software Engineering, GPA: 3.7/4 (top 3%) — Sep. 2018 - Jun. 2022

The Hong Kong University of Science and Technology — Hong Kong S.A.R.
Visiting student in the Department of Computer Science and Engineering, GPA: 4/4.3 — Jul. 2021 - Nov. 2021

PUBLICATION

SOTER: Guarding Black-box Inference for General Neural Networks at the Edge
USENIX ATC'22 (with result reproduced badge), links: [paper][code][video][slides]
Tianxiang Shen, Ji Qi, Jianyu Jiang, Xian Wang, Siyuan Wen, Xusheng Chen, Shixiong Zhao, Sen Wang, Li Chen, Xiapu Luo, Fengwei Zhang, Heming Cui

- This work leverages the associativity property of inference operators to outsource neural network computation to untrusted GPU and restores the results within TEE at the edge. It also devises an oblivious fingerprint to detect integrity breaches.
- Personal contribution: All code implementation and experiments, as well as writing of the evaluation part.

ENIDrift: A Fast and Adaptive Ensemble System for Network Intrusion Detection under Real-world Drift
ACSAC'22 (with artifact functional badge), links: [paper][code][video][slides]
Xian Wang

- The work devises an incremental neural network to extract features of network packets and constructs an adaptive ensemble of ML classifiers to detect anomalies of network packets under real-world drift. It also provides a novel dataset for network intrusion detection.
- Personal contribution: The whole work (implementation, experiment, writing, etc.).

WORK EXPERIENCE

Data Science Intern (full-time internship) — Shanghai, China
Apple — Jan. - Jun. 2022

- Used ML and AI algorithms to detect anomalous data collected at Apple factories. Implemented an online interactive data visualization platform; it was adopted by the Apple DFM Shanghai team.

HONORS & AWARDS

- 2023 - 2025 HKUST Postgraduate Scholarship
- 2021 National Scholarship (top 1%)
- 2020 Chinese Modern Scientist Memorial Scholarship (top 0.05%)
- 2020 National Scholarship (top 1%)
- 2019 National Scholarship (top 1%)

SKILLS

Language	Fluent in English; native Mandarin speaker
Programming	C, C++, Python, MATLAB, SQL
Other tools & platforms	Intel SGX, Linux, Libtorch, PyTorch, TensorFlow, LaTeX