

Fnu Suya

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🔗 [suyeeav](#) • Updated on February 27, 2023

Education

- Ph.D. in Computer Science, University of Virginia Aug 2017 – Dec 2023
- Ph.D. in Computer Science, Arizona State University Aug 2015 – May 2017
- B.Eng. in Electrical Engineering, China Agricultural University Aug 2010 – May 2014

Research Interests

I am interested in the trustworthy aspect of machine learning, including both the security and privacy and their possible interactions.

Research Experience

- University of Virginia, David Evans, Yuan Tian Aug 2017 – Present
 - Machine Learning Security in Training and Inference Time
- Qualcomm Technologies, Inc., Aleksei Triastcyn May 2021 – Aug 2021
 - Poisoning Attacks on Federated Learning
- Amazon Web Services, Inc., MohamadAli Torkamani Jan 2021 – Apr 2021
 - Robust Learning on Extremely Large Graphs
- Bosch Center for Artificial Intelligence, Anit Kumar Sahu June 2020 – Aug 2020
 - Query Efficient Black-box Attacks
- Arizona State University, Guoliang Xue, Paolo Papotti Aug 2015 – Jul 2017
 - Incentive Mechanism Design, Machine learning Privacy
- Tsinghua University, Bo Bai Aug 2014 – Feb 2015
 - Energy Efficient Wireless Communication

Teaching Experience

- Learning Theory (UVA CS 6501-005), TA S2019
- Cryptography (UVA CS 6501-009), TA S2019
- Game Theory (ASU CSE 556), TA F2016
- Introduction to C++ Programming (ASU CSE 100), TA F2015 – S2016
- Introduction to Programming Languages (ASU CSE 240), TA F2015 – S2016

Honors & Awards

- CS Graduate Research Award, University of Virginia 2018
- CS Department Fellowship, University of Virginia 2017
- NSF Travel Grant, GlobalSIP 2016
- CIDSE Doctoral Fellowship, Arizona State University 2015
- Outstanding Student Scholarship, China Agricultural University 2011 – 2013

Service

Conference Reviewer	AISTATS 2023, CVPR 2023, IJCAI 2021-2024, ICML 2020-2023, NeurIPS 2021-2022, ICLR 2021-2023, IEEE S&P 2018-2023, Usenix Security 2018-2023, NDSS 2018-2023, CCS 2018-2022, Sensys 2021-2022, ASIACCS 2019, Euro S&P 2019-2022, AAI 2017-2019, SIGMOD 2017, DASFAA 2017, MobiHoc 2016
Journal Reviewer	Artificial Intelligence, TMLR
Program Committee	IJCAI 2021-2024

Skills

Programing	Python, Matlab, C, C++, L ^A T _E X
Frameworks	TensorFlow, PyTorch, MXNet, NumPy, SciPy, Scikit-learn
Systems	Linux, OSX
Languages	Mongolian (native), Chinese, English

Publications

Google Scholar ID: OmLIG8EAAAAJ

- 2023a** F. Suya, X. Zhang, Y. Tian, D. Evans. "Understanding Inherent Vulnerabilities of Datasets to Poisoning Attacks". In: *Under Submission*.
- 2023b** Y. Tian, F. Suya, A. Suri, F. Xu, D. Evans. "Manipulating Transfer Learning for Property Inference". In: *The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2023)*.
- 2022a** E. Rose, F. Suya, D. Evans. "Poisoning Attacks and Subpopulation Susceptibility". In: *Best Paper Award, 5th Workshop on Visualization for AI Explainability (VISxAI workshop)*. URL: <https://uvasrg.github.io/poisoning/>.
- 2022b** F. Suya, A. Suri, T. Zhang, S. Hong, Y. Tian, D. Evans. "SoK: What Have We Learned About Black-box Attacks Against Classifiers?" In: *Under Submission*.
- 2022c** Y. Tian, F. Suya, F. Xu, D. Evans. "Stealthy Backdoors as Compression Artifacts". In: *IEEE Transactions on Information Forensics and Security* 17, pp. 1372–1387. URL: <https://arxiv.org/abs/2104.15129>.
- 2021** F. Suya, S. Mahloujifar, A. Suri, D. Evans, Y. Tian. "Model-Targeted Poisoning Attacks with Provable Convergence". In: *The Thirty-eighth International Conference on Machine Learning (ICML 2021)*. URL: <https://arxiv.org/abs/2006.16469>.
- 2020a** F. Suya, J. Chi, D. Evans, Y. Tian. "Hybrid Batch attacks: Finding Black-box Adversarial Examples with Limited Queries". In: *29th USENIX Security Symposium (USENIX Security 2020)*. URL: <https://arxiv.org/abs/1908.07000>.
- 2020b** J. Wang, M. Luo, F. Suya, J. Li, Z. Yang, Q. Zheng. "Scalable Attack on Graph Data by Injecting Vicious Nodes". In: *The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD 2020)*. URL: <https://arxiv.org/abs/2004.13825>.
- 2019** Y. Chen, M. Zha, N. Zhang, D. Xu, Q. Zhao, X. Feng, K. Yuan, F. Suya, Y. Tian, K. Chen, X. Wang, W. Zou. "Demystifying Hidden Privacy Settings in Mobile Apps". In: *2019 IEEE Symposium on Security and Privacy (S&P 2019)*. URL: <https://ieeexplore.ieee.org/abstract/document/8835388>.
- 2018** F. Suya, D. Evans, Y. Tian. "Poster: Adversaries Don't Care About Averages: Batch Attacks on Black-Box Classifiers". In: *2018 IEEE Symposium on Security and Privacy (S&P 2018)*. URL: <https://www.ieee-security.org/TC/SP2018/poster-abstracts/oakland2018-paper37-poster-abstract.pdf>.
- 2017** F. Suya, Y. Tian, D. Evans, P. Papotti. "Query-limited Black-box Attacks to Classifiers". In: *NIPS Workshop on Machine Learning and Computer Security (MLSec)*. URL: <https://arxiv.org/abs/1712.08713>.
- 2016** F. Suya, Y. Shi, B. Bai, W. Chen, J. Zhang, K. B. Letaief, S. Zhou. "Optimal Stochastic Power Control with Compressive CSI Acquisition for Cloud-RAN". In: *IEEE Global Conference on Signal and Information Processing (GlobalSIP) 2016*. URL: <https://ieeexplore.ieee.org/abstract/document/7906068>.