# Fnu Suya

Suya@virginia.edu ● S fsuya.org ● in suya ● Suyafnu
S suyeecav ● Updated on April 24, 2023

### **Education**

| <ul> <li>Ph.D. in Computer Science, University of Virginia</li> </ul> | Aug 2017 - Dec 2023 |
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| O Ph.D. in Computer Science, Arizona State University                 | Aug 2015 – May 2017 |
| o 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.

### **Internship Experience**

| <ul><li>Qualcomm Technologies, Inc., Aleksei Triastcyn</li><li>Poisoning Attacks on Federated Learning</li></ul>         | May 2021 – Aug 2021  |
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| <ul><li>Amazon Web Services, Inc., MohamadAli Torkamani</li><li>Robust Learning on Extremely Large Graphs</li></ul>      | Jan 2021 – Apr 2021  |
| <ul> <li>Bosch Center for Artificial Intelligence, Anit Kumar Sahu</li> <li>Query Efficient Black-box Attacks</li> </ul> | June 2020 - Aug 2020 |

## **Mentoring Experience**

- Yulong Tian (Visiting PhD student at UVa, PhD student at NJU, China)
- Tingwei Zhang (Undergraduate student at UVa, now a PhD student at Cornell CS)
- Evan Rose (Undergraduate student at UVa, now a PhD student at Northeastern CS)
- Scott Hong (Undergraduate student at UVa, now a MS student at UCLA)

# **Teaching Experience**

| <ul> <li>Learning Theory (UVA CS 6501-005), TA</li> </ul> | S2019         |
|---|---------------|
| <ul><li>Cryptography (UVA CS 6501-009), TA</li></ul>      | S2019         |
| <ul><li>Game Theory (ASU CSE 556), TA</li></ul>           | F2016         |
| ○ Introduction to C++ Programming (ASU CSE 100), TA       | F2015 - S2016 |
| o Introduction to Programming Languages (ASU CSE 240), TA | F2015 - S2016 |

### **Honors & Awards**

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

### **Service**

PC/Conference Reviewer AISTATS 2023, ICCV 2023, CVPR 2023, ICML 2020-2023,

NeurIPS 2021-2023, ICLR 2021-2023, IJCAI 2021-2024, Eu-

roS&P 2022

Journal Reviewer Artificial Intelligence, TMLR

Sub-Reviewer IEEE S&P 2018-2023, Usenix Security 2018-2023, NDSS 2018-

2023, CCS 2018-2023, Sensys 2021-2022, ASIACCS 2019, Eu-

roS&P 2019-2021, AAAI 2017-2019, SIGMOD 2017

### **Skills**

Programing Python, Matlab, C, C++, LATEX

Frameworks PyTorch, TensorFlow, 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, The 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*
- **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.