# Shuaiqi Wang

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■ Swqwsq.github.io

# **Education**

#### Carnegie Mellon University

Pittsburgh, PA, USA

O Ph.D. Student, Dept. of Electrical and Computer Engineering

*Jan.* 2021 - Mar. 2026 (expected)

O Advisor: Giulia Fanti

# Shanghai Jiao Tong University (SJTU)

Shanghai, China

Sep. 2016 - Jun. 2020

Bachelor of Engineering, Dept. of Computer Science
 Zhiyuan Honors Program of Engineering (Top 5%)

# **Research Interests**

Theoretical foundations of machine learning, and the applications in privacy and security, large language models, data synthesis and sharing, and federated learning.

# Experience

# Microsoft (Research Intern)

Pittsburgh, PA, USA

O Host: Zinan Lin, Pei Zhou

Sep. 2024 - Dec. 2024

O Topic: differentially private data synthesis for structured datasets based on large language models

#### Amazon (Research Intern)

San Diego, CA, USA

O Host: Alireza Mehrtash

Jun. 2024 - Aug. 2024

O Topic: adversarial attack on vision language models

# JPMorgan Chase (AI Research Intern)

New York, NY, USA

O Host: Mohsen Ghassemi

Jun. 2023 - Aug. 2023

O Topic: privacy protection across multiple summary statistical properties

# **Publications**

- Shuaiqi Wang, Vikas Raunak, Arturs Backur, Victor Reis, Pei Zhou, Sihao Chen, Longqi Yang, Zinan Lin, Sergey Yekhanin and Giulia Fanti. "Struct-Bench: A Benchmark for Differentially Private Structured Text Generation", in *NeurIPS* 2025.
- Shuaiqi Wang, Sayali Deshpande, Rajesh Kudupudi, Alireza Mehrtash and Danial Sabri Dashti.
   "MASAN: Enhancing Attack Stealth and Efficacy on Vision-Language Models via Smart Noise", in ICLR 2025 BuildingTrust.
- Shuaiqi Wang, Shuran Zheng, Zinan Lin, Giulia Fanti and Zhiwei Steven Wu. "Inferentially-Private Private Information", in WWW 2025.
- o Jiajun Gu, Yuhang Yao, **Shuaiqi Wang**, Carlee Joe-Wong. "Evaluating Selective Encryption Against Gradient Inversion Attacks", in *arXiv*.
- Enshu Liu, Junyi Zhu, Zinan Lin, Xuefei Ning, Shuaiqi Wang, Matthew B Blaschko, Sergey Yekhanin, Shengen Yan, Guohao Dai, Huazhong Yang and Yu Wang. "Linear Combination of Saved Checkpoints Makes Consistency and Diffusion Models Better", in *ICLR* 2025.
- o **Shuaiqi Wang**, Zinan Lin and Giulia Fanti. "Statistic Maximal Leakage", in *ISIT* 2024.
- o **Shuaiqi Wang**, Rongzhe Wei, Mohsen Ghassemi, Eleonora Kreacic and Vamsi Potluru. "Guarding Multiple Secrets: Enhanced Summary Statistic Privacy for Data Sharing", in *ICLR* 2024 *PML*.

- o Xinyi Xu, **Shuaiqi Wang**, Chuan-Sheng Foo, Bryan Kian Hsiang Low and Giulia Fanti. "Data Distribution Valuation with Incentive Compatibility", in *NeurIPS* 2024.
- o **Shuaiqi Wang\***, Zinan Lin\*, Vyas Sekar and Giulia Fanti. "Summary Statistic Privacy in Data Sharing", in *IEEE Journal on Selected Areas in Information Theory (JSAIT*) (2024).
  - \* Equal contribution.
- o Ronghao Ni, Zinan Lin, **Shuaiqi Wang** and Giulia Fanti. "Mixture-of-Linear-Experts for Long-term Time Series Forecasting", in *AISTATS* 2024.
- Shuaiqi Wang, Jonathan Hayase, Giulia Fanti and Sewoong Oh. "Towards a Defense Against Federated Backdoor Attacks Under Continuous Training", in *Transactions on Machine Learning Research* (*TMLR*) (2023).
- o Benjie Miao, **Shuaiqi Wang**, Luoyi Fu and Xiaojun Lin. "De-anonymizability of Social Network: Through the Lens of Symmetry", in *MobiHoc* 2020.
- Luoyi Fu, Jiapeng Zhang, Shuaiqi Wang, Xinyu Wu, Xinbing Wang and Guihai Chen. "De-anonymizing social networks with overlapping community structure", in *IEEE/ACM Transactions on Networking* 28.1 (2020): 360-375.
- o Xudong Wu, Luoyi Fu, **Shuaiqi Wang**, Bo Jiang, Xinbing Wang and Guihai Chen. "Collective Influence Maximization in Mobile Social Networks" in *IEEE Transactions on Mobile Computing* (2021).

#### **Honors and Awards**

<ul> <li>Carnegie Institute of Technology Dean's Fellow</li> </ul>	2021
O Zhiyuan Distinguish Scholarship (Top 1%)	2020
O Zhiyuan College Honors Scholarship (Top 5%)	2017, 2018, 2019
Academic Excellence Scholarship	2017, 2018, 2019
• First Prize in China Undergraduate Computer Design Competition (Top 5%)	2019

# Skills

**Programming Languages:** Python, C, C++, Java, MATLAB, Mathematica, LATEX, HTML, bash, shell. **Machine Learning Frameworks:** TensorFlow, PyTorch, Keras, Transformers, etc.

# **Professional Services**

Conference Reviewer: NeurIPS'21-25, ICLR'24-25, ICML'25, AISTATS'24-25, WWW'25.

o IEEE International Symposium on Information Theory (ISIT 2024)

**Journal Reviewer:** TMLR, IEEE/ACM Transactions on Networking, IEEE Transactions on Information Forensics and Security.

**Graduate Teaching Assistant:** CMU 18752 Estimation, Detection and Learning; CMU 18734 Foundations of Privacy.

### Talks and Interviews

Statistic Maximal Leakage	
o GCoM Lab in Georgia Tech	Oct. 2024
<ul> <li>SIAM Conference on Mathematics of Data Science (MDS 2024)</li> </ul>	Oct. 2024
o CMU CyLab Partners Conference 2024	Sep. 2024
<ul><li>Interview by NiklasOPF [talk video]</li></ul>	Aug. 2024

Aug. 2024