

Shuaiqi Wang

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Education

Carnegie Mellon University

Pittsburgh, PA, USA

Jan. 2021 - Dec. 2025 (expected)

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

Sep. 2024 - Dec. 2024

- Host: Zinan Lin, Pei Zhou
- Topic: differentially private data synthesis for structured datasets based on large language models

Amazon (Research Intern)

San Diego, CA, USA

Jun. 2024 - Aug. 2024

- Host: Alireza Mehrtash
- Topic: adversarial attack on vision language models

JPMorgan Chase (AI Research Intern)

New York, NY, USA

Jun. 2023 - Aug. 2023

- Host: Mohsen Ghassemi
- 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 *arXiv*.
- **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*.
- 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*.
- **Shuaiqi Wang**, Zinan Lin and Giulia Fanti. “Statistic Maximal Leakage”, in *ISIT 2024*.
- **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*.

- Xinyi Xu, **Shuaiqi Wang**, Chuan-Sheng Foo, Bryan Kian Hsiang Low and Giulia Fanti. “Data Distribution Valuation with Incentive Compatibility”, in *NeurIPS 2024*.
- **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.
- 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).
- 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.
- 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

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| ○ Carnegie Institute of Technology Dean’s Fellow | 2021 |
| ○ Zhiyuan Distinguish Scholarship (Top 1%) | 2020 |
| ○ 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.
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

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| ○ GCoM Lab in Georgia Tech | Oct. 2024 |
| ○ SIAM Conference on Mathematics of Data Science (MDS 2024) | Oct. 2024 |
| ○ CMU CyLab Partners Conference 2024 | Sep. 2024 |
| ○ Interview by NiklasOPF [talk video] | Aug. 2024 |
| ○ IEEE International Symposium on Information Theory (ISIT 2024) | Aug. 2024 |