

Xiaoyuan Liu (刘啸远)

Ph.D. Student in Computer Science

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EDUCATION

Shanghai Jiao Tong University

Honors Bachelor of Engineering (B.Eng. Hons) in Computer Science

University of California, Berkeley

EECS Ph.D. student advised by [Professor Dawn Song](#)

- Member of [Berkeley Center for Responsible, Decentralized Intelligence \(RDI\)](#),
- [Initiative for Cryptocurrencies & Contracts Lab \(IC3\)](#), and
- [Berkeley Artificial Intelligence Research \(BAIR\) Lab](#).

Shanghai, China

Sept. 2016 ~ June 2020

Berkeley, USA

2020 ~ (Expected) 2026

SELECTED PROJECTS

MPC4F (with [Meta AI](#), [Oasis Labs](#))

Multi-Party Computation for AI Fairness Evaluation

■ Rust

2021

- Architect a privacy-preserving fairness evaluation system that involves multi-party computation, differential privacy, homomorphic encryption, and zero-knowledge proof.
- Lead a team to fulfill its development, industry-level code auditing, deployment, and delivery to Meta.

PUBLICATIONS

HADES: Range-Filtered Private Aggregation on Public Data [\[pdf\]](#)

[VLDB'25](#)

Xiaoyuan Liu, Ni Trieu, Trinabh Gupta, Ishtiyaque Ahmad, Dawn Song

ThreatKG: An AI-Powered System for Automated Open-Source CTI Gathering and Management [\[pdf\]](#)

[LAMPS'24](#)

Peng Gao*, Xiaoyuan Liu* (equal contribution), Edward Choi, Sibom Ma, Xinyu Yang, Dawn Song

Ratel: MPC-extensions for Smart Contracts [\[pdf\]](#)

[AsiaCCS'24](#)

Yunqi Li, Kyle Soska, Zhen Huang, Sylvain Bellemare, Mikerah Quintyne-Collins, Lun Wang, Xiaoyuan Liu, Dawn Song, Andrew Miller

Evaluating Large Language Models in an Emerging Domain: A Pilot Study in Decentralized Finance [\[pdf\]](#)

[ICLR Workshop'24](#)

Joshua Carter Pearson, Xiaoyuan Liu, Chengsong Huang, Kripa Ann George, Dawn Song, Chenguang Wang

Effective and Efficient Federated Tree Learning on Hybrid Data [\[pdf\]](#)

[ICLR'24](#)

Qinbin Li, Chulin Xie, Xiaojun Xu, Xiaoyuan Liu, Ce Zhang, Bo Li, Bingsheng He, Dawn Song

Lessons Learned: Surveying the Practicality of Differential Privacy in the Industry [\[pdf\]](#)

[PETS'23](#)

Gonzalo Munilla Garrido, Xiaoyuan Liu, Florian Matthes, Dawn Song

A System for Automated Open-Source Threat Intelligence Gathering and Management [\[pdf\]](#)

[SIGMOD'21 Demo](#)

Peng Gao*, Xiaoyuan Liu* (equal contribution), Edward Choi, Bhavna Soman, Chinmaya Mishra, Kate Farris, Dawn Song

Enabling Efficient Cyber Threat Hunting With Cyber Threat Intelligence [\[pdf\]](#)

[ICDE'21](#)

Peng Gao, Fei Shao, Xiaoyuan Liu, Xusheng Xiao, Zheng Qin, Fengyuan Xu, Prateek Mittal, Sanjeev R Kulkarni, Dawn Song

A System for Efficiently Hunting for Cyber Threats in Computer Systems Using Threat Intelligence [\[pdf\]](#)

[ICDE'21](#)

Peng Gao, Fei Shao, Xiaoyuan Liu, Xusheng Xiao, Haoyuan Liu, Zheng Qin, Fengyuan Xu, Prateek Mittal, Sanjeev R Kulkarni, Dawn Song

BeeTrace: A Unified Platform for Secure Contact Tracing that Breaks Data Silos [\[pdf\]](#)

[IEEE Data Engineering Bulletin'20](#)

Xiaoyuan Liu, Ni Trieu, Evgenios M Kornaropoulos, Dawn Song

Pretrained Transformers Improve Out-of-Distribution Robustness [\[pdf\]](#)

[ACL'20](#)

Dan Hendrycks*, Xiaoyuan Liu* (equal contribution), Eric Wallace, Adam Dziedziec, Rishabh Krishnan, Dawn Song

Distributed Structured Actor-Critic Reinforcement Learning for Universal Dialogue Management [\[pdf\]](#)

[IEEE-ACM T AUDIO SPE](#)

Zhi Chen, Lu Chen, Xiaoyuan Liu, Kai Yu

TEACHING EXPERIENCE

Lead Teaching Assistant *Entrepreneurship in Web3*

Fall 2022

Teaching Assistant *Decentralized Finance*

Fall 2021

Student Instructor *Principle and Practice of Computer Algorithms*

Summer 2018

Lead Teaching Assistant *Data Structures*

Spring 2018

Lead Teaching Assistant *C++ Programming (A)*

Fall 2017

HONORS AND AWARDS

RDI Frontier Fellowship

2024

JP Morgan Chase PhD Fellowship

2023

Berkeley EECS Department Fellowship

2020

Outstanding Student Cadre (Top 0.8%, SJTU)

2018

KoGuan Encouragement Scholarship (Top 0.3%, SJTU)

2017

Academic Excellence Scholarship

2017, 2018, 2019

Zhiyuan Honorary Scholarship

2016, 2017, 2018

The 32nd China's National Olympiad in Informatics (NOI) Silver Medal

2015