# Yu Jiang

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## **Research Interests**

Trustworthy AI, Distributed System

#### **Education**

- Present Nanyang Technological University Singapore
  Ph.D. in Computer and Data Science CGPA: 4/5
  Supervisor: Prof. Chee Wei Tan and Prof. Kwok-Yan Lam
- 2020 2022 **The Chinese University of Hong Kong, Shenzhen** Shenzhen, CHina M.Phil. in Computer and Information Engineering CGPA: 3.7/4 Supervisor: Prof. Wei Cai
- 2016 2020 **Xiamen University** Xiamen, China B.Eng. in Digital Media Technology CGPA: 3.4/4 Supervisor: Prof. Yingying She

#### **Publications**

#### REPRESENTATIVE CONFERENCE (C) AND JOURNAL (J) PAPERS

- 2025 [J.3] Yu Jiang, Jiyuan Shen, Ziyao Liu, Chee Wei Tan, Kwok-Yan Lam. Towards Efficient and Certified Recovery from Poisoning Attacks in Federated Learning. *IEEE Transactions on Information Forensics and Security, 2025.*
- Ziyao Liu, **Yu Jiang (corresponding author)**, Weifeng Jiang, Jiale Guo, Jun Zhao, Kwok-Yan Lam. Guaranteeing Data Privacy in Federated Unlearning with Dynamic User Participation". *IEEE Transactions on Dependable and Secure Computing, IEEE.*
- 2024 [C.4] **Yu Jiang**, Xindi Tong, Ziyao Liu, Huanyi Ye, Chee Wei Tan, Kwok-Yan Lam. Efficient Federated Unlearning with Adaptive Differential Privacy Preservation. 2024 IEEE International Conference on Big Data (IEEE BigData 2024).
- 2024 [C.3] **Yu Jiang**, Chee Wei Tan, Kwok-Yan Lam. Accelerating Federated Unlearning via Polyak Heavy Ball Method. 2024 IEEE Information Theory Workshop (ITW).
- 2024 [J.1] Ziyao Liu, Yu Jiang, Jiyuan Shen, Minyi Peng, Kwok-Yan Lam, Xingliang Yuan, Xiaoning Liu. A Survey on Federated Unlearning: Challenges, Methods, and Future Directions. ACM Computing Surveys, 2024, 57(1): 1-38.
- 2022 [C.2] **Yu Jiang**, Tian Min, Sizheng Fan, Rongqi Tao, and Wei Cai. Towards understanding player behavior in blockchain games: A case study of aavegotchi. *In Proceedings of the 17th International Conference on the Foundations of Digital Games, pp. 1-12. 2022.*
- 2022 [C.1] Yu Jiang, Sizheng Fan, and Wei Cai. Economic analysis of loot box market in blockchain games. In Proceedings of the Fourth ACM International Symposium on Blockchain and Secure Critical Infrastructure, pp. 35-46. 2022.

## **Professional Experience**

Mar. 2025 - **Tencent**, Singapore

Present Applied research intern

Large Language Models for Cryptocurrency and Quantitative Trading.

Spring 2024 - Nanyang Technological University, Singapore

Present Graduate Student Researcher

Advisor: Prof. Chee Wei Tan.

AI safety in federated unlearning and LLM agent. [J.1, J.2, J.3, C.3, C.4]

Apr. 2023 - Digital Trust Centre, Nanyang Technological University, Singapore

Jan. 2024 Research Engineer

Mentor: Prof. Kwok-Yan Lam.

Design on credentials for food products to ensure authenticity and traceability.

Design on blockchain analysis platform.

Jun. 2022 - **Tencent**, Shenzhen, China

Nov. 2022 Data Science Intern

Research on the Web 3 including project analysis, smart contract and ETH 2.0.

Sep. 2021 - Huawei Technologies Co. Ltd., Shenzhen, China

Feb. 2022 Industry Research Intern

Mentor: Xiaojun Zhang.

Conducted analysis on blockchain market, summarized global CBDC architectures.

Fall 2020 - The Chinese University of Hong Kong, Shenzhen, Shenzhen, China

Summer 2021 Graduate Student Researcher

Advisor: Prof. Wei Cai.

Research on user behavior in blockchain games via on-chain data and clustering. [C.2]

Research on virtual asset trading and optimizing pricing strategies. [C.1]

## **Academic Service**

2024-2025 Reviewer, IEEE Transactions on Information Forensics and Security

2025 Reviewer, IEEE Transactions on Dependable and Secure Computing

2025 PC Member, International Joint Conferences on Artificial Intelligence

2024 Reviewer, IEEE Transactions on Mobile Computing

### **Awards and Honors**

2016 – 2020 Award for Excellence in Academic Performance (Xiamen University)

2016 2nd Prize in the 8th National College Mechanical Innovation Competition

# **Technical Skills & Language**

Programming Python, HTML/CSS, C#.

Language IELTS: 7.0; GRE: 320; CET 6: 569; CET 4: 622.