

JIAXI YANG

The Pennsylvania State University, USA

abbottyanginchina@gmail.com, <https://abbottyanginchina.github.io>

AREA OF INTEREST

Trustworthy AI, LLMs, Federated Learning, Data Valuation, Network Economics

EDUCATION

The Pennsylvania State University 2024 - now
Ph.D. Supervised by Prof. *Lu Lin*

University of British Columbia 2022 - 2023
Research Intern Supervised by Prof. *Xiaoxiao Li*

University of Electronic Science and Technology of China 2021 - 2024
M.S. in Computer Science
GPA: 3.5/4.0 Supervised by Prof. *Sheng Cao*

Jiangxi University of Finance and Economics 2017 - 2021
B.Eng. in Software Engineering
GPA: 91.5/100 **Ranking First**

PUBLICATIONS

Matching-based Data Valuation for Generative Model 2023
Jiaxi Yang, Wenglong Deng, Benlin Liu, Yangsibo Huang, Xiaoxiao Li
The IEEE Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2023

Portfolio-Based Incentive Mechanism Design for Cross-Device Federated Learning 2024
Jiaxi Yang, Sheng Cao, Cuifang Zhao, Weina Niu, Li-Chuan Tsai
IEEE Wireless Communications and Networking Conference (WCNC), 2024

Multi-dimensional Data Quick Query for Blockchain-based Federated Learning 2023
Jiaxi Yang, Sheng Cao, Peng Xiangli, Xiong Li, Xiaosong Zhang
International Conference on Wireless Algorithms, Systems, and Applications (WASA), 2022

TranDRL: A Transformer-Driven Deep Reinforcement Learning Enabled Prescriptive Maintenance Framework 2024
Yang Zhao, **Jiaxi Yang**, Wenbo Wang, Helin Yang, Dusit Niyato
IEEE Internet of Things Journal (Q1)

PREPRINTS

GMValuator: Similarity-based Data Valuation for Generative Models 2023
Jiaxi Yang, Wenglong Deng, Benlin Liu, Yangsibo Huang, James Zou, Xiaoxiao Li
<https://arxiv.org/pdf/2304.10701.pdf>

A Survey of Federated Unlearning: A Taxonomy, Challenges and Future Directions 2023
Yang Zhao*, **Jiaxi Yang*** (*Equal Contribution), Yiling Tao, Lixu Wang, Xiaoxiao Li, Dusit Niyato
<https://arxiv.org/pdf/2310.19218.pdf>

Federated Learning Incentive Mechanism under Buyers' Auction Market 2023
Jiaxi Yang*, Zihao Guo*, Sheng Cao, Cui Fang Zhao, Li-Chuan Tsai
<https://arxiv.org/pdf/2309.05063.pdf>

A Survey on Trustworthiness in Foundation Models for Medical Image Analysis 2024
Congzhen Shi*, Ryan Rezai*, **Jiaxi Yang***, Qi Dou, Xiaoxiao Li
<https://arxiv.org/pdf/2407.15851>

PATENTS

Insurance Compensation Apparatus and Method based on Hybrid Smart Contracts *Granted*
China National Intellectual Property Administration (ZL202110835114.8)

An Incentive Mechanism Method for Decision-Making *Granted*
China National Intellectual Property Administration (ZL202110835181.X)

PRESENTATIONS & TALKS

Multi-dimensional Data Quick Query for Blockchain-based Federated Learning 2022
International Conference on Wireless Algorithms, Systems, and Applications (WASA, 2022)

Data Valuation for Generative Model (Invited Talk) 2023
Annual Symposium of Blockchain Storage and Trade Engineering Laboratory of Sichuan Province

AWARDS & HONORS

The First Prize Scholarship from UESTC 2023
The Third Prize Scholarship from UESTC 2022
The First Prize Scholarship from UESTC 2021
China National Scholarship from Ministry of Education of China (Top 0.2% Nationwide) 2020
Outstanding Graduate from JXUFE 2021
Enterprise Scholarship from Bank of Jiujiang 2019