

JIAXI YANG

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AREA OF INTEREST

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

EDUCATION

The Pennsylvania State University Ph.D. in Informatics	2024 - now
University of British Columbia Research Intern Supervised by Prof. <i>Xiaoxiao Li</i>	2022 - 2023
University of Electronic Science and Technology of China M.S. in Computer Science GPA: 3.5/4.0 Supervised by Prof. <i>Sheng Cao</i>	2021 - 2024
Jiangxi University of Finance and Economics B.Eng. in Software Engineering GPA: 91.5/100 <i>Ranking First</i>	2017 - 2021

PUBLICATIONS

Boosting E-commerce Content Diversity: A Graph-based RAG Approach with User Reviews Jiaxi Yang* , Yiling Jia*, Carl Yang, Yi Liang, Lu Lin <i>ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD, 2025)</i>	2025
GMValuator: Similarity-based Data Valuation for Generative Models Jiaxi Yang* , Wenlong Deng*, Benlin Liu, Yangsibo Huang, James Zou, Xiaoxiao Li <i>The International Conference on Learning Representations (ICLR, 2025)</i>	2024
A Survey of Federated Unlearning: A Taxonomy, Challenges and Future Directions Yang Zhao*, Jiaxi Yang* (*Equal Contribution), Yiling Tao, Lixu Wang, Xiaoxiao Li, Dusit Niyato <i>IEEE Network</i>	2025
Unlearning for Federated Online Learning to Rank: A Reproducibility Study Yiling Tao, Shuyi Wang, Jiaxi Yang , Guido Zuccon <i>ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR, 2025)</i>	2025
Portfolio-Based Incentive Mechanism Design for Cross-Device Federated Learning Jiaxi Yang , Sheng Cao, Cuifang Zhao, Weina Niu, Li-Chuan Tsai <i>IEEE Wireless Communications and Networking Conference (WCNC, 2024)</i>	2024
Multi-dimensional Data Quick Query for Blockchain-based Federated Learning Jiaxi Yang , Sheng Cao, Peng Xiangli, Xiong Li, Xiaosong Zhang <i>International Conference on Wireless Algorithms, Systems, and Applications (WASA, 2022)</i>	2023
TranDRL: A Transformer-Driven Deep Reinforcement Learning Enabled Prescriptive Maintenance Framework Yang Zhao, Jiaxi Yang , Wenbo Wang, Helin Yang, Dusit Niyato <i>IEEE Internet of Things Journal (Q1)</i>	2024

PREPRINTS

- Topological Structure Learning Should Be A Research Priority for LLM-Based Multi-Agent Systems** 2025
Jiaxi Yang*, Mengqi Zhang*, Yiqiao Jin*, Hao Chen, Qingsong Wen, Lu Lin, Yi He, Weijie Xu, James Evans, Jindong Wang
<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>
- Federated Learning Incentive Mechanism under Buyers' Auction Market** 2023
Jiaxi Yang*, Zihao Guo*, Sheng Cao, Cuifang Zhao, Li-Chuan Tsai
<https://arxiv.org/pdf/2309.05063.pdf>

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