+852 68440855
kun.yan@polyu.edu.hk
https://quinyim.github.io
Last updated: Nov. 2026

Kun Yan Ph.D.

Education

Xidian University Xi'an, China
Ph.D. in Cryptography Aug. 2021 - Jun. 2025
- Research Area: 6G Networks, Evolutionary Algorithm, and Blockchain

Xidian University Xi'an, China
M.E. in Information and Communications Engineering Aug. 2019 - Aug. 2021
- Research Area: Internet of Vehicles and Blockchain

Xi'an University of Technology Xi'an, China
B.E. in Internet of Things Engineering Aug. 2015 - Jun. 2019
- Research Area: Internet of Things and Data Monitoring

Research Interests

Technologies: Blockchain, Evolutionary Algorithm, Game Theory, Deep Reinforcement Learning, and Applied Cryptography.

Applications: 6G Networks, SAGIN, Internet of things, Decentralized Network Management, Dynamic Resource Management, and Network Security and Privacy.

Publications

1. **Kun Yan**, Wenping Ma, and Shaohui Sun, "BECS: A Privacy-Preserving Computing Resource Sharing Mechanism in 6G Computing Power Network," in *IEEE Transactions on Network Science and Engineering*, vol. 13, pp. 4725-4742, 2026. (IF=7.9)
2. **Kun Yan**, Wenping Ma, Shaohui Sun, and Weiwei Wang, "Blockchain-Based Dynamic Spectrum Sharing for Service-Centric 6G Networks: An Evolutionary Approach," in *IEEE Transactions on Network Science and Engineering*, vol. 13, pp. 485-500, 2026. (IF=7.9, ESI Highly Cited Paper)
3. **Kun Yan**, Wenping Ma, and Shaohui Sun, "Communications and Networks Resources Sharing in 6G: Challenges, Architecture, and Opportunities," in *IEEE Wireless Communications*, vol. 31, no. 6, pp. 102-109, Dec. 2024. (IF=10.9)
4. **Kun Yan**, Wenping Ma, Qi Yang, Shaohui Sun, and Weiwei Wang, "Info-Chain: Reputation-Based Blockchain for Secure Information Sharing in 6G Intelligent Transportation Systems," in *IEEE Internet of Things Journal*, vol. 11, no. 5, pp. 9198-9212, Mar. 2024. (IF=10.6)
5. **Kun Yan**, Ping Zeng, Kan Wang, Wenping Ma, Geng Zhao, and Yingjie Ma, "Reputation Consensus-Based Scheme for Information Sharing in Internet of Vehicles," in *IEEE Transactions on Vehicular Technology*, vol. 72, no. 10, pp. 13631-13636, Oct. 2023. (IF=6.8)
6. **Kun Yan**, Jiamin Deng, Xin Xie, Zhe Peng, and Bin Xiao, "Verifiable Cross-Pass Continuation for Radio Frequency Sensing in LEO Satellite Networks," in *IEEE INFOCOM*, Under Review.
7. **Kun Yan**, Zhe Peng, Helei Cui, Chenhao Lin, Guyue Li, and Bin Xiao, "LOGIC: Lyapunov-Optimized Game-Theoretic Intelligent Blockchain for Trusted Collaboration in 6G SAGIN," in *IEEE Transactions on Network Science and Engineering*, Under Review.
8. Weiwei Wang, Wenping Ma, and **Kun Yan**, "FSPPCFs: a privacy-preserving collaborative filtering recommendation scheme based on fuzzy C-means and Shapley value," in *Complex & Intelligent Systems*, vol. 11, p. 107, Jan. 2025. (IF=5)

9. Weiwei Wang, Wenping Ma, and **Kun Yan**, "Trust-aware privacy-preserving QoS prediction with graph neural collaborative filtering for internet of things services," in *Complex & Intelligent Systems*, vol. 11, p. 191, Feb. 2025. (IF=5)
10. Weiwei Wang, Wenping Ma, and **Kun Yan**, "TEPP: A Robust Trust-Enhanced Privacy-Preserving Quality of Service Prediction Method for Web Service Recommendation," in *Expert Systems With Applications*, Volume 294, p. 128786, Dec. 2025. (IF=7.5)

Work Experience

Postdoctoral Fellow in The Hong Kong Polytechnic University
Department of Industrial and Systems Engineering Jan. 2026 - Now

- Research Area: Blockchain, SAGIN, Network Management, and Network Security

Teaching Experience

Teaching Assistant in Modern Cryptography
School of Telecommunications Engineering, Xidian University Jun. 2022

- Introducing the research and application of blockchain

Teaching Assistant in Random Signal Analysis and Applications
School of Telecommunications Engineering, Xidian University May. 2024

- Introducing spectrum sharing and management methods based on artificial intelligence, blockchain and other technologies

Research Experience

Supervision of Undergraduate and Master's Theses
School of Telecommunications Engineering, Xidian University Nov. 2021 - Jun. 2024

- Guiding undergraduate and master's students in blockchain-related research and supervising their thesis work based on this research.

Research Assistant in Exploration of 6G Networks and Blockchain Technology
Datang Mobile Communications Equipment Co., Ltd Apr. 2023 - Oct. 2024

- Research on distributed service security in 6G networks and blockchain-based network management.

Grant Proposal Experience

National Natural Science Foundation of China Mar. 2022 - Mar. 2025

- Authored the main body of the proposal, formulating its research content, technical framework, and key innovations.

National Key Research and Development Program of China Sep. 2021 - Aug. 2023

- Authored a key research section of the proposal, responsible for its background analysis, research content, and implementation plan.

Open Found of State Key Laboratory Jun. 2024 - Aug. 2024

- Authored the core technical scheme and primary innovation points for the research proposal.

Projects

Research on Key Technologies for Mobile Communication Network Security
Datang Mobile Communications Equipment Co., Ltd Nov. 2021 - Oct. 2024

- Security Threats and Requirements in 6G Networks
- Applications of Blockchain in 6G Security
- Applications of Blockchain and Artificial Intelligence in 6G Resource Management

Research on Security Collaborative Defense Technology for Wind Power Internet Intelligent Manufacturing
Shaanxi Provincial Science and the Technology Department Jan. 2022 - Dec. 2024

- Security, Trust, and Privacy Protection of Data in Distributed Networks

- Blockchain-Based Distributed Information Sharing

Awards and Honors

National Scholarship
Ministry of Education of the People's Republic of China Nov. 2024

Excellent Graduate Student
Xidian University Nov. 2024

First Prize Academic Scholarship
Xidian University Oct. 2023

Third Prize of the First National Cryptography Contest
Chinese Association for Cryptologic Research Aug. 2022

Skills

Languages: Chinese, English.
Programming: `Golong`, `C++`, `MATLAB`, `Python`.

Academic Services

Reviewers for: *IEEE Access*,
IEEE Systems Journal,
IEEE Communications Letters,
IEEE Internet of Things Journal,
IEEE Communications Magazine,
IEEE Consumer Electronics Magazine,
IEEE Open Journal of the Computer Society,
IEEE Transactions on Industrial Informatics,
IEEE Transactions on Control Systems Technology,
IEEE Transactions on Computational Social Systems,
IEEE Transactions on Network Science and Engineering,
IEEE Transactions on Network and Service Management,
IEEE Transactions on Dependable and Secure Computing,
IEEE Transactions on Green Communications and Networking,
Computer Networks,
Information Sciences,
Vehicular Communications ,
Expert Systems With Applications,
Journal of Network and Computer Applications,
Engineering Applications of Artificial Intelligence,
Computing,
Applied Intelligence,
Complex & Intelligent Systems,
Journal of Cloud Computing: Advances, Systems and Applications,
ACM Transactions on Sensor Networks.