YUANHANG ZHOU

Z zhouyh1999@gmail.com · **८** (+86) 187-5188-4216 ·

Blockchain: Blockchain Application, Security and Privacy, Applied Cryptography Crowdsensing: Incentive Mechanism, Optimization, Influence Maximization

EDUCATION

Southeast University 2021.9 – Present

Pursuing Master's degree Cyberspace Security Advisor: Fei Tong

GPA: 3.75/4 (Normalized score: 84.63) Ranking 14 (<4%)

Nanjing University of Posts and Telecommunication (NJUPT)

2017.9 - 2021.6

Bachelor of Engineering Information Security Advisor: Jia Xu

GPA: 3.94/5 Ranking 14 (Elite class)

△ EMPLOYMENT

Southern University of Science and Technology (SUSTech)

2023.6 - Present

Visiting Student Department of Computer Science and Engineering Advisor: Jianyu Niu

4 Honors

National Scholarship, Ministry of Education	2022
"Huawei Cup" 1st Network Security Innovation Competition, Third Prize	2022
First Class Postgraduate Academic Scholarship, Southeast University	2021
Excellent Graduation Thesis, NJUPT	2021

■ RESEARCH ACHIEVEMENTS

Academic Page Google Scholar ORCID

Publications

- Yuanhang Zhou, Fei Tong, and Shibo He, "Bi-objective Incentive Mechanism for Mobile Crowdsensing with Budget/Cost Constraint," *IEEE Transactions on Mobile Computing (TMC)*. 2022. CCF-A.
- Jia Xu, Yuanhang Zhou, Gongyu Chen, et al., "Topic-aware Incentive Mechanism for Task Diffusion in Mobile Crowdsourcing through Social Network," ACM Transactions on Internet Technology (TOIT). 2022. CCF-B.
- Jia Xu, **Yuanhang Zhou**, Yuqing Ding, et al., "Biobjective Robust Incentive Mechanism Design for Mobile Crowdsensing," *IEEE Internet of Things Journal (IoTJ)*. 2021. **JCR Q1**.
- Jia Xu, Gongyu Chen, **Yuanhang Zhou**, et al., "Incentive Mechanisms for Large-Scale Crowdsourcing Task Diffusion Based on Social Influence," *IEEE Transactions on Vehicular Technology (TVT)*. 2021. **JCR Q1**.

Unpublished Research

- Yuanhang Zhou, Fei Tong, Kaiming Wang, et al., "A Privacy-Preserving Incentive Mechanism for Mobile Crowdsensing based on Blockchain," submitted to *IEEE Transactions on Dependable and Secure Computing (TDSC)*. Major revision (Revision submitted).
- Fei Tong, Jiuhe Liu, **Yuanhang Zhou**, et al., "BAC-IDS: A Blockchain-Assisted Collaborative Intrusion Detection System for Smart Home IoT," submitted to *IEEE Internet of Things Journal (IoTJ)*.
- First Author, "Towards Efficient, Robust, and Privacy-preserving Incentives for Crowdsensing via Blockchain," Under research.
- First Author, "MIC: A Framework with Reliable Consensus for Intelligent Transportation," Under research.

Patents

- "A Privacy-preserving Incentive Mechanism Method for Crowdsensing based on Blockchain", Authorized First Student Author
- "A Bi-objective Incentive Mechanism Method for Crowdsensing", Authorized First Student Author
- "A Bi-objective Crowdsensing System and Incentive Method", Authorized First Student Author
- "An Anomaly User Detection Method for Temporal and Spatial Mobile Crowdsensing", Authorized *Third Author*
- "A Topic-aware Task Diffusion Method and Incentive for Crowdsourcing", Authorized Third Author

RESEARCH EXPERIENCE

Dynamic Consensus for Intelligent TransportationSUSTech

2023.6 - Present

- Design and realize transportation decision for intelligent transportation (V2X)
- Consider dynamic participation in consensus

Incentive Analysis in Blockchain ConsensusSUSTech

2023.6 - Present

- Survey the consensus and incentives in blockchain platforms
- Analysis the rationality of incentives using game theory

Incentive Design for Crowdsensing via Blockchain Southeast University 2021.7 – Present

- Realize a decentralized crowdsensing system based on blockchain
- Design secure and privacy-preserving incentive mechanisms under blockchain architecture

Crowdsourcing Task Diffusion based on Social Network NJUPT 2020.6 – 2021.6

- Realize the crowdsourcing task diffusion based on social network for influence maximization

Robust Incentive Mechanism Design for Crowdsensing *NJUPT* 2019.4 – 2020.5

- Design robust incentive mechanisms for crowdsensing system

OTHER EXPERIENCE

Academic Report Beijing Institute of Technology

2022.11

Long Report, 2nd Distributed Control, Optimization and Security, Zhizhen Academic Forum for Postgraduate

Project Director Southeast University

2022.10 - Present

Student Research Training Program and Student Information Security Contest

Conference Reviewer 2022.8

IEEE/CIC International Conference on Communications in China (ICCC)

Teaching Assistant Southeast University

2021.9-2022.2

Principles of Computer Composition

Short Visit Tohoku University

2018.8

Learning frontier technology in Computers and Electronics

i OTHER INFO

- Address: Jiulonghu Campus, Southeast University, Nanjing, Jiangsu Province, P.R. China (Postal Code: 211189)
- Academic E-mail: 220215212@seu.edu.cn