

MOHAN YU

✉ yumohan01@gmail.com · ☎ (+86) 182-9827-4226

🔍 RESEARCH INTERESTS

Blockchain: Blockchain Scalability, Off-chain Computation

Privacy and Security: Applied Cryptography, Trusted Environment Execution

🎓 EDUCATION

Southeast University (SEU)

2022.09 – Present

Pursuing Master's degree Network and Information Security Advisor: **Fei Tong**
GPA: 87.81/100

Anhui University of Technology (AHUT)

2018.09 – 2022.06

Bachelor of Engineering Computer Science and Technology Advisor: **Heng Liu**
GPA: 4.1/4.5

🏆 HONORS

Merit graduate student, <i>SEU</i>	2024
“Huawei Cup” 1st Network Security Innovation Competition, Third Prize	2023
First Class Postgraduate Academic Scholarship, <i>SEU</i>	2023
National Postgraduate Mathematical Contest in Modeling, Third Prize	2023
Excellent Graduate of Anhui Province	2022
Excellent Graduation Thesis of Anhui Province	2022

📖 RESEARCH ACHIEVEMENTS

Publications

- **Mohan Yu**, Heng Liu, “FML-MIS: A Scheme of Privacy Protection and Model Generalization for Medical Images Segmentation via Federated Meta-learning,” *International Conference on Image and Graphics (ICIG)*. 2023.

Unpublished Research

- **Mohan Yu**, Fei Tong, Yuanhang Zhou, et al., “SPOE: Scaling Blockchain via Secure and Practical Off-chain Execution,” submitted to *IEEE Transactions on Information Forensics & Security (TIFS)*. Under review.
- Kaiming Wang, Fei Tong, **Mohan Yu**, et al., “A Blockchain-Assisted Secure and Lightweight Cross-Domain Authentication for Internet of Things,” submitted to *IEEE Internet of Things Journal (IoTJ)*. Under review.

👥 RESEARCH EXPERIENCE

Blockchain Scaling Solutions Based on Off-Chain Computation	<i>SEU</i>	2023.09 – Present
- Design an off-chain computation scheme based on the TEE-blockchain framework - Design security and privacy protection mechanisms within the blockchain architecture		
Cross-Domain Authentication Based on Scalable Blockchain	<i>SEU</i>	2024.01 – 2024.03
- Design on-chain load migration for lightweight IoT cross-domain authentication		
Federated Medical Image Generation and Privacy Protection	<i>AHUT</i>	2021.07 – 2022.04
- Enhance model generalization using meta-learning techniques		

Vision-Based Scene Recognition and Understanding *AHUT* 2020.04 – 2021.06
- Apply a YOLOv4 object detection module and binocular distance measurement
- National Undergraduate Innovation and Entrepreneurship Training Program (SRTP)

OTHER EXPERIENCE

Project Director *SEU* 2023.12 – 2024.06
Student Research Training Program and *Student Information Security Contest*

Teaching Assistant *SEU* 2022.09 – 2023.02
Principles of Computer Composition

Teaching Assistant *AHUT* 2021.04 – 2021.06
Software Engineering

OTHER INFO

- Address: Jiulonghu Campus, Southeast University, Nanjing, Jiangsu Province, P.R. China (Postal Code: 211189)
- Academic E-mail: 220224861@seu.edu.cn