

Hao Ma

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🌐 <https://haoma2772.github.io/>



Education

- 📖 **Undergraduate**, School of Computer Science and Technology, Shanndong University, 2021-2025

Research Interest

- 📖 **Federated Learning**
- 📖 **Artificial Intelligence Security**

Research Publications

Journal Articles

- 1 Senmao Qi, **Hao Ma**, Yifei Zou, Dongxiao Yu, Peng Li, and Xiuzhen Cheng, “A backdoor resilient approach for federated edge learning with fragment-sharing,” Submitted to JSA.
- 2 Senmao Qi, **Hao Ma**, Yifei Zou, Dongxiao Yu, Peng Li, and Xiuzhen Cheng, “Fragment-sharing is enough to backdoor a giant model in federated learning,” Submitted to Big Data Mining and Analytics 2023.

Conference Proceedings

- 1 **Hao Ma**, Senmao Qi, Jiayue Yao, Yuan Yuan, Yifei Zou, and Dongxiao Yu, “Fed-nad: Backdoor resilient federated learning via neural attention distillation,” Accepted by IEEE IDS 2024.
- 2 Senmao Qi, **Hao Ma**, Yifei Zou, Yuan Yuan, Peng Li, and Dongxiao Yu, “Fed-ms: Fault tolerant federated edge learning with multiple byzantine servers,” Accepted by IEEE ICDCS 2024.
- 3 Senmao Qi, Yifei Zou, **Hao Ma**, Dongxiao Yu, Peng Li, and Xiuzhen Cheng, “No backdoor in decentralized federated learning: A multi-armed bandit-based knowledge distillation approach,” Submitted to CCS, Apr. 2024.

Skills

- 📖 **Languages:** CET6-493
- 📖 **Coding:** Python, C++, Matlab, \LaTeX ,
- 📖 **Qualities:** Good team work and communication skills

Miscellaneous Experience

Awards and Achievements

- 📖 Second Class Prize in ChinaUndergraduate Mathematical Contest in Modelling, Shandong Province, 2023.
- 📖 Second class of Academic Innovation Award of Shandong University Special Talents Scholarship, 2023.
- 📖 Second Class Academic Scholarship of Shandong University, 2022 and 2023.
- 📖 National Encouragement scholarship of Shandong University, 2022 and 2023.
- 📖 Second Class Prize in Chinese Mathematics Competitions, Shandong Province, 2022.

Miscellaneous Experience (continued)

- Second Class Prize in the Mathematical Competition of Senior High School of China Shandong Province, 2020.

Academic Experience

- **GPA:** 89.347 (rank: 11.1%, 22/197).
- **Research Assistant:** 2022-now, Institute of Intelligent Computing.
- **Computer Elite Class:** member of Computer Elite Class , 2021, which is committed to cultivating future excellent top talents in computer science and leading figures in the IT industry