Shaoying Wang

Florida State University

Phone: （+1)8506882542
Data of Birth: 09/26/1999
Email: sw22bh@fsu.edu

Research Interest: Security, Wireless Networks, Machine learning

Education

Florida State University	**(PhD.)**	**Jan. 2023- Now**

PhD., Computer Science

Cleveland State University	**(PhD.)**	**Aug. 2021 -Jan. 2023**

PhD., Computer Science
GPA: 4.0/4.0

o Operating System, Analysis of Algorithms, Network Security and Privacy, Adv Computer Architecture, Data Mining

Hebei University of Technology (China)	**(Bachelor)**	**Sep. 2016 - June.2020**

B.E., Measurement,Control Technology and Instruments
GPA: 3.54/4.0   **RANKING: 15/141**

o Related Coursework: Computer Numerical Control, Computer Simulation Technology, Probability and Statistics (100/100), Digital Signal Processing, Micro-controller Principle and Application

Research Experience

Remora computing-based friend suggestion system using Facebook PYMK   **(Sep. 2021 - Jan. 2023)**
Electrical Eng & Comp Science, Cleveland State University

o Designed a friend suggestion system using Facebook PYMK (People You May Know) and location based social networking app.

o Utilized facilities available from service providers to build social networks without sharing information to service providers.

o Converted user's personal information to coordinate location in social network app to implement friend suggestion function.

o I am responsible for the whole project idea implementation and experimental design (**Android Studio** for app development and **Python** for crawling data).

ECG Pairing (ECGP): A Key Generation Protocol Based on ECG Features   **(Mar. 2022 - Jan. 2023)**
Electrical Eng & Comp Science, Cleveland State University

o A novel, light weight scheme is presented for wearable devices pairing. We use ten features of ECG instead of just IPI. We design the mixed bits algorithm to employ ten features of ECG to generate secure and reliable keys.

o Illustrated the resistance analysis of our protocols to several classical attacks, proving that our protocol is highly resistant to attacks.

o Responsible for core algorithm design and code implementation of algorithms as well as writing paper. (**Matlab** for processing data, implementing algorithms and **Android Studio** for power consumption)

Publication

o **Waste Not, Want Not: Service Migration-Assisted Federated Intelligence for Multi-Modality Mobile Edge Computing.**
Hansong Zhou, Shaoying Wang, Chutian Jiang, Xiaonan Zhang, Linke Guo, Yukun Yuan.
ACM 24th International Symposium on Theory, Algorithmic Foundations, and Protocol Design for Mobile Networks and Mobile Computing (ACM MobiHoc 2023), Washington D.C., Oct 23-26, 2023. (Accept Ratio: 21.9%)

Work Experience

Cleveland State University

Position: Teaching Assistant   **(Aug. 2021 - - Jan. 2023)**

o TA for Operating System, Network Security and Privacy and Introduction to Algorithm.

o Answering students' questions.

o Grading assignments and leading labs.

o Become more familiar with course content and enhance communication skills.

Awards

o Second prize of the 12th Siemens cup in North China in 2018 (Jul. 2018)

o Third prize of the 7th China TRIZ cup innovation and entrepreneurship method competition for College Students in 2019 (May. 2019)

o First prize of the 12th National College Students' energy conservation and emission reduction competition of HEBUT in 2019 (May. 2019)

Skills

Programming Techniques:

o Programming skills in Matlab, Python, C/C++, Android Studio, Graphic Programming Language, Assembly Language, Java.

o Experienced in implementing complex functional system on Microcontroller and PLC and using MATLAB to build mathematical model.

o Strong teamwork and communication skills.