Yijun Yuan

Phone: 412-694-4758 | E-mail: y297981726@gmail.com

EDUCATION BACKGROUND

University of Pittsburgh (Expected Graduation Time: Spring 2023)   09/2021-Present
Current GPA: 3.9
Program: Master of Science in Information Science
Xiamen University, Xiamen, China   09/2017-07/2021
Major: Computer Science and Technology
Degree: Bachelor's degree of Engineering

COMPUTER SKILLS

Programming Languages: Java, C, C++
Technology Stacks: Database (PostgreSQL,MySQL), Spring boot, Linux(Ubuntu,Kali), Nmap, OSI model(TCP/UDP), Blockchain(Ethereum,Bitcoin).
Cooperating Tools: GitHub, Microsoft Azure, Teams, Google Drive.

JOB EXPERIENCE

HIM Student Researcher-HARI Lab(On-campus Job)   **University of Pittsburgh**
Backend Developer   04/2022-Present
- Main responsibilities: working at backend side for portal (using Angular) and App (using Ionic).
- Using Spring boot controller to handle HTTP requests from frontend, and designing different data structures at service level to meet various resources needs. Using PostgreSQL to store data with appropriate design of schemas including implementing key constraints, using transient annotation and writing converter to deal with JSON data in Spring boot.
- Building real-time messaging services using Socket.io and Engine.io in Java as server side and cooperate with the client side. I Built the HTTP servlet to turn raw HTTP request into the structure that Socket.io needs. I also designed all namespace and back-and-forth logic to realize chatting and active push notification. And the project is using Google FCM for inactive push notification.
- Adding website analytic to collect users' behaviors in order to help user better understand how to use the application. I transformed raw data into meaningful user profile periodically with the help regular expression in Java and schedular annotation in Spring Boot.
- Using Postman and Swagger UI to test APIs. Swagger UI is used for checking the correction of endpoint URL, parameter name, parameter type in an intuitive way. Using Postman to write raw http(s) requests to test the usability of endpoint as well as run test scripts (if applicable).

COURSEWORK EXPERIENCE

Penetration Testing Under Real Network   **University of Pittsburgh**
Team Member   09/2022
- Tested the network of Aerotech, Inc. within the permitted scope.
- Used Open-source intelligence gathering and made a detailed plan. Performed scanning and reconnaissance with Nmap, Nessus and Dirbuster tools.
- Analyzed the scanning result and attempted to gain system access with the help of Responder, BloodHound and Metasploit, which are used for collecting credentials. Forwarded captured credentials to Hashcat or

directly used them. Maintained access or leveraged privileges in the system by creating own accounts.
- Recorded Proof of Concept of valuable assets and cleaned up modifications. Then wrote the report and provided it to customers.

Blockchain Seminar Course Project   **University of Pittsburgh**
Team Member   01/2022
- Designed a Medical Data Storage System using Rinkeby test network in Ethereum, which has 3 smart contracts working together. Wrote a material in IEEEtran format to show the result.
- Achieved confidentiality, integrity and authenticity by using RSA, ensuring that the owner of data has full control over all past records.
- Data structure design and algorithm chosen can be optimized or altered to provide more flexibility like using shared key/ephemeral key for secrecy of data and updating the data structure by referring to real electronic health record.

Information Security and Privacy Course Project   **University of Pittsburgh**
Individual   09/2021-12/2021
- Utilized Java libraries to simulate secure communication over network, including calculating digest, encrypting message using both symmetric (AES) and asymmetric keys (El Gamal, RSA), creating and verifying digital signature(X.509 certificate).