Peiran Wang

Sichuan University, Chengdu, China, 10610

Email: whilebug@gmail.com | Tel: +86-17883693551 Blog：https://www.whilebug.com

Education

09/2018 – Present	Sichuan University, Chengdu, China

·   Bachelor of Cyberspace Security Dept. of Cyber Science and Engineering

GPA: 3.89/4.00 (2/173)

Awards: National Student Scholarship during 2018-2019 (Top 2% of 173 students)

University's Scholarship First-class Reward during 2018-2019(Top 2% of 173 students)

University's Scholarship Third-class Reward during 2019-2020 (Top 10% of 173 students)

The provincial third prize of the National University Student Mathematical Contest in Modeling

The provincial third prize of the National University Student Mathematical Contest

Research Experiences

09/2019 - Present   Prof. Chenghuang's group, CSE, SCU, China

Project: **A domestic system terminal situation awareness platform based on machine learning**

·   Learned the use of flask, osquery, and the abnormal detection method based on machine learning

·   Learned network programming, system programming

·   Developed a intrusion detection system based on anomaly detection.

04/2020 – Present   Prof. Chenghuang's group, CSE, SCU, China

Project: **JavaScript Browser-side Cryptomining Detectionusing Static Methods**

·   Learned abstract syntax tree, malicious code detection.

·   Learned basic steps for machine learning and how to use it for malicious code detection.

·   Learned the processes of composing a paper, the skills of reading, comprehending and summarizing a paper.

·   A paper is submitted to IFIP-SEC 2021.

11/2020 – Present   Prof. Beibei Li's group, CSE, SCU, China

Project: **Research about the byzantine-tolerant mechanism**

·   Learned the structure of Federated Learning, how to construct a FL architecture, the problems and challenges remaining in Federated Learning.

·   Learned the concept of byzantine attacks in FL , different types of byzantine attacks in FL and current byzantine defense mechanism proposed by former researchers. I'm trying to construct a byzantine-tolerant Federated Learning architecture. I had worked out with the basic idea and was currently working on the codes and paper.

·   A paper is expected to be finished within two months.

Publications

1. "**JavaScript Browser-side Cryptomining Detectionusing Static Methods**" <u>**P, Wang.**</u>(Paper submitted to IFIP-SEC 2021 - EI index)

Research Experiences

- *AI security*
- *Malicious code detection*
- *Federated Learning*

Language Skills

01/2021	IELTS **R**: 8.5 **L**: 8.5 **S**: 6.5 **W**: 5.5 **Total**: 7.5

Technical Skills

·   **Professional Skills:** Machine learning, deep learning, penetration testing, basic cyber security skills(use of sniffer capture tools, SQL-injection tools, network scan tools), basic computer science knowledge(computer network, database, operating system, data structure, cryptology).

·   **Preferred programming language:**C/Python/JavaScript/HTML

·   **Familiar programming framework:**Flask/Keras/scikit-learn/numpy/matplotlib/pandas

Summary

I studied hard since I entered SCU, and got a top scholarship(National Student Scholarship which is given to the top 2% in my university) during 2018-2019. I was good at math and got A or A- in most of my courses related to math or computer. The experience of CTF competition was essential to me as well. The experience helped me to understand the desire of industrial community and led me to improve my combat capability. I had learned some other web vulnerabilities such as SQL-injection, XSS, CSRF and was familiar to the binary vulnerabilities as well. Meanwhile, I'd also developed the habit of reading paper which improved my English reading skills.