# Peiyu(Steven) Wang

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#### **OBJECTIVE**

Seeking internship in the fields of Information Security and Computer Science during summer 2018.

#### **EDUCATION & CERTIFICATION**

**John Hopkins University** 

**Aug 2017 - Dec 2018 (Expected)** 

Master of Science, Information Security.

GPA: 3.67

**Georgia Institute of Technology** 

May 2014 - May 2017

Bachelor of Science, Computer Engineering.

GPA: 3.4

Offensive Security Certified Professional (OSCP)

Jan 2018

PROFESSIONAL EXPERIENCE

**Security Intern** 

May 2018 – Aug 2018

NCC Group

Chicago, IL

**Work in Progress** 

# **Software Engineering Intern**

May 2017 - Aug 2017

Cisco

Alpharetta, GA

- Helped to deliver a web application that uses customer submitted data for generalized data analysis. Worked
  on the full stack of this application which included an Angular JS web UI, Python Flask API, and a Redis
  database. Constantly received feedback and adjusted the application to meet the needs of the audience.
- Cisco Security Ninja Green Belt Certificate.

## Hardware Engineering Intern EchoStar Corporation

Aug 2015 — Dec 2015 & May 2016—Aug 2016

Sandy Springs, GA

- Automated Set-top box testing with Raspberry pi. Tested set-top box circuit board voltage, smart card reader, output signal, TV image output, and RF receiver.
- Collected data from testing equipment such as oscilloscope and camera, process and analysis data with python script.

Teaching Assistant Georgia Tech Jan 2017 — May 2017

Atlanta, GA

• Assisted in teaching ECE2036(Engineering Software Design(C/C++)); Task includes assisted Professor with tutoring students, grading projects, and record keeping.

#### ACADEMIC PROJECTS

# **Information Security Lab**

May 2017 - Aug 2017

- Defused 14 binary bombs through reverse engineering with Hopper, Radare2, GDB, IDA Pro.
- Exploited CTF-pwn type vulnerable programs using different pwn methods (Ret/EBP modify, bypass stack canary/ASLR, format string, Ret-to-libc, ROP). (write-ups are available on my GitHub)
- Designed 32-bit and 64-bit shellcode for exploits.

### **Cryptosystem Implementation(GO)**

Aug-2017- Dec 2017

- Implemented CBC encryption with HMAC and padding oracle attack in Go.
- Implemented key generation, encryption and decryption for RSA and Rabin cryptosystem in Go.
- Analyzed Noise protocol framework and implement Noise xx () pattern in Python.

### Reliable Transport Protocol(C/C++)

Jan 2016 - May 2016

- Designed and implemented a Reliable Transport Protocol (RTP) using a single UDP socket to transfer files
  over the network.
- Implemented RTP functionality to provide congestion control, receiver window based flow control, handling of multiple connections on the server (multiplexing and demultiplexing), recovery from packet loss, and reordered packets and handling corrupted packets

## **SKILLS**

- Programming Languages: Python, C/C++, Go, Assembly, MySQL, JavaScript/HTML.
- Tools: Metasploit, Burp Suite, Wireshark, Nmap; GDB, Hopper, IDA Pro.

# **ACTIVITIES AND INTERESTS**

- Participated in multiple CTF (Capture The Flag) events.
- Enhance hacking skills by solve online challenges from "OverTheWire", "pentesterlab.com", "hax.tor".