Leon Chou

http://bleepbloopsify.github.io

 bleepbloopsify
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Experience

Square Inc.
Mosec

New York City, NY
Aug. 2019 – Present

- **Java**: Backend Engineer for cross-team java services
- **Mosec-Impact**: Work cross company to ensure that our low-level software requirements are met
- **SPEsim**: Work that allows the team to reverse engineer and attack a secure device from an attackers standpoint, but also reduces hardware costs
- **Manual Command Queue**: Designed, architected, and implemented a system that allows internal company researchers to access security information on devices

Square Inc.
Mosec Intern

New York City, NY
Jun. 2019 – Aug. 2019

- **Mosec-Detections**: java engineer and iOS/Android developer
- **Android/iOS**: automated injection/debug management of esoteric mobile devies

Cisco Umbrella
Cybersecurity Research Intern

San Francisco, CA
Jun. 2018 – Sept. 2018

- **HTTP/S Datasets**: Data ingestor and pipeline management of large exported datasets
- **Docker/Docker-Compose**: from-scratch devops work to scale and maintain custom services for my team
- **Web Crawler**: JS based web crawler designed to beat captchas and pull page data for suspicious sites
- **TF-IDF**: statistical analysis of web pages to generate relevant groupings of sites using DNS data

VE International
Part-time freelance

Remote to NY
Jun. 2018 – Aug. 2018

- **Single Sign-On**: designed, architected, and implemented a custom oauth microservice
- **Third-party sign-in**: designed, architected, and implemented a self-service system to add third-party sign on systems.
- **Canvas LMS API**: designed, architected, and implemented a self-service hook based API on a third party software using plugins

OSIRIS Lab
Cybersecurity Research Lab

Brooklyn, NY
Jan. 2017 – Present

- **CSAW CTF 18 Lead**: Managing challenges and organization for CSAW CTF.
- **Infrastructure**: Architectured and upkeep for servers in the lab, making sure services stay up.

Projects

CSAW CTF
CyberSecurity Awareness Worldwide CTF hosted by NYU Tandon.

CSAW CTF Co-lead
2018-2019

- **CTF**: Coordinated challenges and competitors together to create a quality CTF.
- **Infra**: co-designed, architected, and implemented a devops system to run CTFs at the push of a button

ugo
Go decompiler plugin for IDA PRO

Binary Analysis
Sep. 2017 – Dec. 2017

- **IDAPython**: Attached to AST generated by IDA to change the way function calls were displayed.
- **GoLang**: Researched the fundamentals of how go works (under the hood), how the calling convention, stack, etc. works.

AD-Tooling
Internal tool to interface with Attack/Defense CTFs

OSIRIS Lab
Sep. 2017 – Present

- **Flask**: Wrote a small flask microservice to host a frontend for the packet analysis backend
- **SQLAlchemy/MySQL**: Put packets into relational database form for actual analysis.
- **JSX/React**: Frontend in react to make for easy iterations and for a more modern take on interfaces.

Languages

Python, Ruby: Used for quick PoCs and small interactive scripts. Experience with multithreading and webservers.

Java, golang: Backend engineer working with many common Google packages

Node.JS/JavaScript: Scripting, frontend, backend, native applications.

C/C++: large experience writing command line tools in C, exploits in both languages, and rewriting programs to be more performant

Go: Micro API services written to start easier goroutine-based tasks.

Education

NYU Tandon School of Engineering   New York, NY
Expected Bachelor of Science in Computer Science; GPA: 3.6   *Sep. 2016 – May 2020*

Stuyvesant High School   New York, NY
High School Diploma, GPA: 3.5   *Sep. 2012 – Jun. 2016*