Victoria Sasaoka

(619)-490-5629 * San Diego, CA* vsasaoka@gmail.com

EDUCATION

University of California, San Diego | Bachelors of Science in Computer Science **2020-2023**

- GPA: 3.76
- Member of ACM Cyber at UCSD
- Competed in National Cyber League Competition in Spring 2022 and Fall 2022

EXPERIENCE / RELEVANT COURSEWORK

- Incoming Summer (06/12/23-09/01/23) SRE intern at Cisco Meraki
- Summer intern (06/14/22 – 09/01/22) at Los Alamos National Laboratory's High Performance Computing (HPC) cluster as an undergraduate CS researcher in network administration/security analytics. Project focused on: building and testing virtual networks and monitoring tools, building automated testing frameworks for continuous monitoring of network traffic and sessions by validating network policies, integrating the developments into the HPC monitoring infrastructure, and monitoring networks for signs of intrusion with tools like Wireshark, tcpdump, etc. Project used industry-based tools (CloudVision, Juniper's JSA SIEM and vSRX firewall, Splunk, and Ansible) as well as custom scripts.

Object-Oriented Programming/Data Structures/Java

- CSE 11: Object-Oriented Design in Java
- CSE 12: Basic Data Structures and Object-Oriented Design; covered linked lists, stacks, queues, binary trees and hash tables in Java; JUnit framework for unit testing; used Eclipse as IDE
- CSE 100: Advanced Data Structures; covered self-balancing trees and graph traversal algorithms in C++
- Participated in FIRST Robotics Competitions from 2018-2020 as the lead programmer; implemented the commands and subsystems of the team's robot in Java

Python

- Interned at Benchmark Labs in 2020, where I created map projections and interactive timeseries graphs of netcdf climate data using the Python data science stack (NumPy, Jupyter, Pandas, SciPy, Matplotlib)
- Created helpful scripts for network enumeration as part of penetration testing hobby

Linux Server Administration & Unix Utilities

- Server admin experience from maintaining a private Cardano staking pool with two Ubuntu 20.04 servers
- Kali Linux/Debian experience from penetration testing hobby
- CSE 15L: Software Tools and Techniques Laboratory; covered Bash Scripting, Git and Github usage, Vim editor, debugging tools like GDB, memory management tools like Valgrind

Miscellaneous

- CSE 30: Computer Organization and Systems Programing; explored hardware architecture and processor design using ARM assembly, C programming with an emphasis on pointer logic and translating to/from assembly

- CSE 110: Software Engineering; developed an Android application with a team of 6 people for detecting nearby students who share previous courses using Bluetooth and Google's Nearby API; used Git for version control, employed Agile Methodology with Zenhub to keep track of tasks and user stories, continuous integration with Github Actions, Unit/UI/Integration testing with Junit, Espresso and Robolectric frameworks, and applied design patterns like MVP, Strategy, Adapter, Observer, Factory Method, Builder, etc.
- CSE 101: Design and Analysis of Algorithms with focus on dynamic programming, graph algorithms, greedy and divide and conquer algorithms, complexity analysis and NP-complete problems.
- Virtualbox and VMware experience from setting up personal pentesting labs
- CSE 120: Operating Systems- implemented a threading system with synchronization, system calls for user level processes, and multiprogramming in an instructional operating system (nachos)
- CSE 127: Computer Security - Overview of control flow vulnerabilities and attacks, web security, and network security
- CSE 140L: Digital Design - System Verilog and Quartus Prime software for designing circuits
- CSE 142L: Advanced Digital Logic Design - implementing compiler optimizations, utilizing caching/ temporal and spatial locality, and instruction level parallelism. Labs used C, C++, Python and x86 assembly

CERTFICATIONS

CompTIA Network+ **2021-2024**

CompTIA Security+ **2021-2024**