

Education

California Polytechnic State University (Cal Poly), San Luis Obispo (SLO)

B.S. Computer Science, concentrating in Security

Graduation: June 2021

Work Experience

Software Development Engineer Intern (Security), *GoDaddy (Remote)* June—September 2020

- Automated processes for on-demand analysis/reporting of CVE exploit exposure of potentially-affected machines within GoDaddy's infrastructure.
- Utilized Mitre ATT&CK's STIX implementation to relate techniques, tactics, and mitigations with relevant CVE exploits and their supporting classifications/weaknesses in Go.
- Created a Go library to retrieve detailed information for CVEs, CPEs, and CAPECs using APIs for NIST and CIRCL.
- Enriched IP and domain-related IOCs using Shodan data for internal team tools.

Junior Security Operations Center Analyst, *Cal Poly (SLO)* October 2019—Present

- Triaged student, faculty, and staff-submitted phishing emails and suspicious user account network activity for blue-team tasks.
- Achieved proficiency in Splunk by creating alerts, advanced dashboards, and workflows and completed Splunk Fundamentals I.
- Automated a Python script to parse, enrich, and normalize email files and IOCs to streamline daily analysis processes.

Threat Research Intern, *BlackBerry Cylance Inc. (Irvine, CA)* June—September 2019

Stuart McClure — CEO Executive Circle Summer Internship Program

June—September 2018

- Developed an advanced automation framework to validate and test team-developed EDR rules against malicious and trusted binaries, and integrated it into the team's Jira workflow.
- Created an EDR rule validation tool using Python for team usage and to validate consumer submissions.
- Contributed towards mitigating the MITRE ATT&CK Framework and secured high-priority company deals with custom EDR rules.
- Learned advanced static and dynamic malware analysis skills and techniques and Metasploit hacking skills.
- Enriched malicious hashes with family classification data using VirusTotal and internal APIs.

Skills

Security Automation	Splunk	Malware Analysis	x86 Reverse Engineering
Python	C	Go	Regex
REST APIs	Python Flask	Web Scraping	Metasploit
pfSense	VLANs	Firewall Administration	Computer Networking
BASH/ZSH	vim	git	L ^A T _E X
VMware	Docker	systemd	

Projects

White Hat Malware Lab

- Personally-developed lab environment for teaching static/dynamic malware analysis techniques to club members.
- Allows for club research on malware attacks, antivirus bypasses, reverse-engineering training, and Kali Linux/Metasploit ethical penetration-testing teaching and practice.
- Powered by VMware ESXI, Python Flask, pfSense, and CrowdStrike Hybrid Analysis.

White Hat Cybersecurity Club (SLO)

- Malware Tech Team Lead – Project founder and leader of a 20+ member team. Fall 2019—Present
- SysAdmin – Administrator of lab server, networking, and custom CTF infrastructure. Spring 2019—Present
- Webmaster – Developer/Maintainer of club website (<https://thewhitehat.club>). Spring 2018—Spring 2019
- Gave technical talks on Virtualization Security, Malware Analysis, Web Server Security, Security Question Security, Intro to Networks and the Internet, DNS and DNS Security.

Relevant Coursework

Computer Security	Wireless Security	Programming Languages
Computer Networks	Systems Programming	Computer Architecture
Operating Systems	Intro to Computing with Security	Technical Writing