

Christopher Makarem

christopher.makarem@iocscan.io • christopher-makarem.me

Engineering undergrad with 2+ years of experience in systems and hardware design with strong focus on security seeking an opportunity to solve complex and interesting problems in the field of hardware/firmware security.

EDUCATION

University of California, Los Angeles

Henry Samueli School of Engineering

Bachelor of Science, Electrical Engineering

GPA: 3.02

Expected Graduation: March 2019

SKILLS

Languages: Java, C++, C, PERL (limited)

Scripting: Python, PowerShell, Bash, JavaScript

Principles: DHCP, IPv6, 6to4 tunneling, DNSSEC,
Virtual networking, VPN (all types)

Tools: Wireshark, Logstash, Fiddler, NXLog, Regular Expressions

Web Apps: NodeJS, Angular, React, Bootstrap

Environments: Active Directory (MAC and Windows)

Services: ADFS, ADCS, WDS, S4B, SSL VPN
SharePoint, Exchange, Cisco CME

EXPERIENCE

Security Analyst (SAII – SAIII)

The DigiTrust Group

Santa Monica, CA

October 2017 – Present

- Identified and classified key threats to client's network environments through log collection and aggregation to allow the support of new hardware devices contributing to increased client retention
 - Created PowerShell scripts to compile and standardize different log formats
 - Performed extensive DFIR research on network traffic patterns and user behavior
- Crafted information visuals in Elastic's Kibana to improve DFIR research and Health Check reports
- Wrote JavaScript functions to automate event handling for Security Analysts, reducing click volume and increasing productivity and turnaround time on event processing

Help Desk Technician

The Broad Foundation/Family Office Financial Services

Century City, CA

October 2016 – September 2017

- Created custom PowerShell GUI tool for automatic user provisioning and migration to improve efficiency
- Deployed ADFS to facilitate MFA for end users, while ensuring in office security by restricting access to publicly accessible terminals such as conference rooms and phone booths
- Created custom SharePoint search page and URI handler to provide a more refined search for our SharePoint sites that allowed for improvements to refinement and specificity

Systems Administration Intern

American Computers and Engineers

Los Angeles, CA

June 2014 – September 2014; June 2015 – September 2015

- Developed Active Directory Environment for Windows based systems.
 - Hardened environment against standard attack vectors: Pass the hash, SMB exploits, DNS poisoning, privilege escalation via poor user access and segregation
- Deployed remote access and administration through DirectAccess and RADIUS server

PROJECTS

IOCSCAN.IO

IP address threat analysis

- Custom created web application that analyzes IP addresses to determine likelihood of malicious activity
- Designed custom heuristic algorithms to determine threat score and construct easy to interpret description

Machine Learning Optimization

Teaching a machine how to optimize

- Designed and implemented a neural network to construct a generalized optimization function to optimize a family of functions superior to standard monolithic algorithms
- Used in the design and model of antennas to maximize energy density and reduce interference