Christopher Makarem

(626) 616-4528 • x24mak@gmail.com • christopher-makarem.me

Software engineering professional with 4+ years of experience in full-stack cyber security analysis and design. Most recent and relevant work has been as a cyber software team lead in charge of program-wide application security.

SKILLS

Languages: Python, C, C++, Java, Ada
Scripting: JavaScript, Matlab, PowerShell, Bash
Principles: Machine Learning (TensorFlow), Covert Channel Analysis, Cryptography (OpenSSL, SRP)

Web Apps: NodeJS, Angular, React, Bootstrap
Environments: Active Directory (Mac and Windows)
ᴸ**Services:** ADFS, ADCS, WDS, S4B, SSL VPN SharePoint, Exchange, Cisco CME

EXPERIENCE

Software Engineer Team Lead
Raytheon Technologies ▪ Space and Airborne Systems

El Segundo, CA
April 2019 – Present

- Software Lead in charge of program-wide application security and software assurance.
  - Have successfully reduced the defect density for newly introduced code by 87%.
  - Responsible for working with customer representatives to ensure cyber-resiliency through tailoring and implementation of risk management controls.
  - Developed a cryptographic framework designed for resiliency and customizability.
- Product Manager for a python-based UI tool that provides explanations and suggests recommended code fixes for defects identified by various static code analysis tools.
  - Developed method to apply AI/ML reinforced learning to improve efficiency and accuracy.

Security Analyst (SAII – SAIII)
The DigiTrust Group

Santa Monica, CA
October 2017 – April 2019

- 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.
  - Performed extensive DFIR research on network traffic patterns and user behavior.

Systems Administration Intern
American Computers and Engineers

Los Angeles, CA
June 2014 – October 2017

- Developed Active Directory Environment for Windows based systems.
- Deployed remote access and administration through DirectAccess and RADIUS server.

CERTIFICATIONS

Certified Information Systems Security Professional (CISSP)
April 2021

Certified Ethical Hacker (CEH)
June 2020

PROJECTS

IOCSCAN.IO
IP address and domain threat analysis

- Custom web application that analyzes IPs and domains to determine likelihood of malicious activity.
- Designed heuristic algorithms to determine threat score and construct easy to interpret description.

UART Linux Device Driver
UART driver implementation with Integrity-BIST for Data Communication

- Based on Surendar & Gopalakrishnan 2017 paper describing a UART implementation with data integrity.

EDUCATION

Bachelor of Science, Electrical Engineering
University of California, Los Angeles (UCLA) - Henry Samueli School of Engineering