

PERSONAL BACKGROUND

Crypto, Software and Cybersecurity Engineering. Team player with a positive & professional attitude.

AREAS OF EXPERTISE

Cryptography / Software Engineering

- Proficient with embedded / resource-restricted environments, safe coding practices, object-oriented programming in C.
- Familiar with X.509 certificate structures, hardware accelerators, ASN.1, CMS, digest / cipher / MAC'ing algorithms, symmetric & asymmetric cryptography, import and export restrictions (ITAR), Intel Secure Device Onboarding, SSL/TLS.
- Proficient with scripting languages such as Bash, Powershell and Batch.
- Experienced in Agile software development, SCRUM, distributed systems, Jira.

PROFESSIONAL EXPERIENCE

Embedded Security Software Engineer

Viasat - Carlsbad, CA | April 2022 to Present

- Maintainer / owner of core-crypto applications running on satellite modems
- Owner for projects adding layers of cryptography to previously-unsecure systems
- Maintain / optimize embedded applications on satellite modems
- Interface with OpenSSL source code for cryptographic operations

Cybersecurity Engineer

Joby Aviation - Santa Cruz, CA | April 2021 to April 2022

- Responsible for architecting and maintaining cybersecurity infrastructure
- Developed security policies in accordance with ISO 27001
- Hosted cybersecurity briefing meetings with executives to articulate the threat landscape
- Familiarity using and implementing a variety of cybersecurity tools and concepts

Embedded Security Software Engineer

Mocana Software - Sunnyvale, CA | February 2018 to April 2021

- Responsible for developing / maintaining core-crypto code in Mocana's TrustPoint IoT Endpoint Security System.
- Develop build systems for crypto libraries using CMake, ensuring cross-platform compatibility for traditional operating systems as well as real-time operating systems.
- Ensure backwards-compatibility with open-source software such as OpenSSL and mbedTLS.
- Ensure all code is memory leak free.

Notable Achievements

- Developed an "adapter" for Mocana's core-crypto API to make calls to a hardware accelerator to perform cryptographic functions.

Webmaster / Web Developer

Onyababy - Santa Cruz, CA | April 2014 to October 2016

- Developed front end website and back end server infrastructure.
- Utilized multiple AWS modules.
- Developed systems for backup and restoration in case of failure.

EDUCATIONAL HISTORY

University of California, Santa Cruz

Bachelor of Science in Computer Science

- Graduated class of 2017

Cabrillo College

Computer Science

- President of Cabrillo College Computer Club
- Graduated/Transferred class of 2015

PAYTON
SCHWARZ

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