

Bryant Hayes

Senior Security Software Engineer

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PROFESSIONAL SUMMARY

Senior security engineer with 5+ years at Apple specializing in enterprise-scale infrastructure and cryptography. Architected systems serving 1+ billion devices with zero security incidents while leading cross-functional teams across multiple product releases. Expert in DRM, secure boot, and embedded systems with proven ability to deliver production-critical security solutions.

PROFESSIONAL EXPERIENCE

Senior Security Software Engineer

Apple Inc. — Cupertino, CA

Dec 2020 — Present

- Architected enterprise-scale security infrastructure serving 1+ billion devices, implementing intelligent pre-loading mechanisms that eliminated server load spikes and improved system reliability by 40%
- Led end-to-end development of critical identity management framework from conception to production, securing cross-functional approval from 5+ teams and enabling seamless platform integrations
- Designed reusable software frameworks adopted across multiple engineering teams, reducing code duplication by 40% through modular components for cryptography and inter-process communication
- Delivered production-critical daemon functionality and client libraries, implementing secure license validation and application launch controls with microsecond-level performance requirements

Senior Software Engineer

Cognex Corp. — Portland, OR

Feb 2019 — Nov 2020

- Led creation of embedded Linux distribution build system using Yocto Project to produce software images for custom hardware, enabling multiple engineering teams to perform distributed builds
- Architected secure boot infrastructure for ARM vision systems with TrustZone technology, implementing system-level security design and deployment across product line

Staff Software Engineer

Cognex Corp. — Portland, OR

Feb 2017 — Jan 2019

- Led platform architecture team as Scrum Master, developing diagnostic firmware to validate custom ARM SoC hardware and support debugging of complex system software
- Spearheaded cross-functional culture initiatives as elected "Minister of Culture," planning activities for multiple teams and promoting Cognex's "Work Hard, Play Hard, Move Fast" values

Associate Software Engineer

Cognex Corp. — Portland, OR

Jul 2016 — Jan 2017

- Designed proprietary autofocus algorithm significantly decreasing focus time on embedded camera systems, creating Python simulation software for algorithm prototyping
- Optimized low-level system performance by analyzing and improving discrete I/O drivers for embedded Linux systems

TECHNICAL SKILLS

Security: DRM · Cryptography · Secure Boot · TrustZone · SEP · Identity Management · License Validation

Languages: C/C++17 · Swift · Python · Objective-C

Frameworks: FastAPI · React · Docker · Yocto

Tools: Git · TeamCity · Redis

EDUCATION

Bachelor of Science in Electrical & Computer Engineering

Oregon State University, Corvallis, OR

2011 — 2016

Dean's List · IEEE Chapter President