THOMAS A. KILBRIDE

PGP Key Fingerprint
8CA4 8A5E 7841 FB3F FBCE
FFEC DD2F 0AD9 7068 4D2F
RSA4096 / 0x70684D2F

CONTACT
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EDUCATION

Purdue University, West Lafayette, IN
Studied Electrical Engineering (Minor in Economics), 2015

EXPERIENCE

Amazon, Inc. Security Engineer, AWS April 2017 - Present

Consulted with teams across Amazon AWS and Amazon Go to help improve the security posture of current and future Amazon offerings. Tasks includes: code review, secure architecture/design, penetration testing, threat modeling, and reverse engineering.

IOActive, Inc. Embedded Security Consultant Spring 2016 - April 2017

Consulted with clients and vendors to help secure their products. Reverse engineered software and hardware to find new vulnerabilities in order to write Proof-of-Concept demonstrations. Refined internal research processes and led research projects to completion. Presented embedded security research at technical conferences such as RSA and Blackhat 20.

Radical Transport, LLC. Embedded Systems Engineer Fall 2015 - Spring 2016

Worked with a small team making hoverboards for Mark Cuban. Responsible for designing hardware to control a two-wheeled self-balancing scooter. Heavily involved with initial concept design, proof-of-concept demonstrations, and prototyping.

Apple, Inc. Hardware Engineering Intern Winter 2015 - Fall 2015

Analyzed the performance of prototype and production Mac systems. Researched and isolated performance bottlenecks and helped teams find architectural improvement areas in software, hardware and silicon.

SKILLS

Programming skills in Python, Java, C, PHP, Verilog/HDL, and ARM/x86 Assembly
Security Engineering experience in IDA Pro, Radare2, Binary Ninja, Burp Suite, and Angr
Experience in PCB Design, Electronics DFM, DC Power Supplies, PCB Layout, Signal Integrity
SPI, I2C, UART, USB, CAN Bus, DDR, Digital Design, and Computer Architecture
Circuit debugging skills with Logic Analyzers, Spectrum Analyzers, Network Analyzers, and Oscilloscopes

ACHIEVEMENTS

Quoted as an expert in the April 2018 issue of Popular Mechanics regarding the 2017 Equifax breach
Released security research on Segway Scooters–disclosure and proof-of-concept were featured by Bruce Schneier, Forbes, and Wired Magazine
Technical presenter on embedded security research at RSA and Blackhat
Founder of Toucan, a company and iOS application selected to interview for the YCombinator S14 batch

PROJECTS

Delivered results for multiple security research projects at IOActive Labs research
Co-Founder of Toucan Checkout, a mobile ordering & payment system
Co-Founder and Project Manager of Purdue Electric Racing team
Technical Director of BoilerMake Badge Design Team