

THOMAS A. KILBRIDE

PGP Key Fingerprint

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

SOCIAL

www.obnauticus.com
github.com/obnauticus
@kilbride.thomas

EDUCATION

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

OBJECTIVE

Searching for full-time employment in low-level software/hardware security engineering or vulnerability research.

EXPERIENCE

IOActive, Inc. Embedded Security Consultant Spring 2016 - Present

Worked with many different clients and vendors to help secure their products. Reverse engineered software and hardware, researched and wrote exploits for Proof-of-Concept demonstrations. Reported results independently and in small teams. Projects varied from desktop software to mechatronics.

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 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.

Toucan Checkout Developer & Co-Founder Winter 2014 - Summer 2014

Assisted in back-end design of a mobile ordering and checkout system which allowed users to order food without waiting in line. The system tracked past user order history to increase revenue for businesses up to 12%.

SKILLS

Programming skills in C, Python, Hardware Description Language, and ARM/x86 Assembly
Reverse-engineering experience with IDA Pro, Radare2, Binary Ninja, and Angr
Knowledge of PCB Design, Electronics DFM, DC Power Supplies, PCB Layout, Signal Integrity
SPI, I2C, UART, USB, CAN Bus, DDR, and Computer Architecture
Circuit debugging skills with Logic Analyzers, Spectrum Analyzers, Network Analyzers, and Oscilloscopes
Experience in SMT soldering, PCB Routing, CNC, manual machining, and rapid prototyping

ACHIEVEMENTS

Technical presenter on embedded security research at RSA Cybersecurity Conference in 2017
Won "Most Technically Impressive" and "Most Likely to Succeed Startup" at MHacks Hackathon
Selected to interview for the YCombinator S14 batch in Palo Alto, CA
Won 1st in "Best Project Concept" in the 2014 HackADay Prize competition

PROJECTS

Leader for IOActive security research efforts in embedded mechatronic systems
Technical Director of BoilerMake Badge Design Team
Co-Founder of Toucan Checkout, a mobile ordering & payment system
Co-Founder and Project Manager of Purdue Electric Racing team