THOMAS A. KILBRIDE

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

admin@obnauticus.com github.com/obnauticus www.obnauticus.com

EDUCATION

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

EXPERIENCE

IOActive, Inc.

Embedded Security Consultant

Spring 2016 - Present

Consulted directly with clients and vendors to help secure their products. Reverse engineered software and hardware to write exploits for Proof-of-Concept demonstrations. Refined internal research processes and led research projects to completion. Presented new 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 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/C++, Python, MATLAB, Verilog/HDL, and ARM/x86 Assembly Reverse-engineering experience with IDA Pro, Radare2, Binary Ninja, 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 Experience in SMT soldering, PCB Routing, CNC, manual machining, and rapid prototyping

ACHIEVEMENTS

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

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

PROJECTS

Managing internal projects and refining internal processes for IOActive Labs research

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