Jay Greco
Electrical Engineer
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I'm an electrical & computer engineer with a knack for thinking big. I am curious, motivated, and strive to learn and improve. I love to dive deep into difficult problems, work hard, and collaborate with an interdisciplinary team to develop cutting-edge products.

Recent Professional Experience

Tensentric Electrical & Computer Engineer   July 2015 - present

- **Electrical design lead,** *Project Azure***:** Lab automation device design for a major scientific company. Responsibilities include:
    - Interfacing with software, mechanical, and management to deliver a successful product to customers
    - Driving system and low-level design, HW/SW bring-up, integrating, testing, documenting, and delivering complex electrical systems at the prototype and production level
    - Project deliverables include schematics, PCB layouts, cable designs and drawings, finalized components and subassemblies, and documented engineering and real-world testing

- **3D scanning endoscope prototype:** Development and integration of software responsible for interfacing with DLP projector hardware, comprising USB HID library and Windows driver DLL files (C++) and Windows interface app (C#)
- **Optical Density (OD) sensor prototype**: Optical sensor module for measurement of bacterial culture growth. Design included theory of operations, circuit synthesis, PCB layout, firmware development, and Windows GUI application (C#)

Other Professional Experience

National Instruments Electrical Engineering Intern   Summer 2014

Other Relevant Skills and Experience

- C/C++, Bash, Python, MATLAB, HTML/CSS/Javascript; basic data structures and algorithms
- Recent Web Application/Cloud integration and development and deployment on Linux VPS platforms, including Amazon AWS and DigitalOcean
- Completion of designs using Mentor Graphics, Cadence Allegro, EAGLE, Altium Designer
- Source control management, including Git (Github, Gitlab) and SVN
- Comfortable quickly iterating on prototype hardware: design, procure, bring-up, test, spin, and repeat
- Growth mindset, excellent problem-solving and communication skills, a good attitude, and high standards

Education

University of Colorado Bachelors of Science, Electrical Engineering   May 2015

- GPA 3.96/4.0, Summa Cum Laude
    - Calculus 1/2/3, Differential Equations, Linear Algebra
    - ECE core courses: C Programming, Digital Logic, and Programming Digital Systems
    - Analog EE core courses: Microelectronics, Electromagnetics, and Linear Systems
    - Lab courses: Analog and Digital Design Labs, and Senior Capstone lab
    - Power Electronics Theory/Lab & Control Systems Theory/Lab

Extracurricular Activities

- Building custom mechanical keyboards using the open-source QMK firmware
- Multiple OSS projects shared on GitHub: highlights include [1], [2], and [3]
- Freelance software design and development for remote clients, including iOS application design, web app frontend & backend design, and deployment on various VPS solutions
- *nix tinkering & smart home projects on Raspberry Pi
- Hardware hacking, teardowns and reverse engineering, including a popular blog post on reverse engineering the Amazon Dash Button (see blog.jay-greco.com)

References, Detailed Project Descriptions, and Design Files & Sample Work Readily Available Upon Request