Brian Bove

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### **Objective**

Highly motivated, independent, and team-oriented individual looking to obtain a fulfilling career in the field of electrical and computer engineering. Available immediately.

#### Education

Oregon State University

Corvallis, Oregon *Graduated* 2016

**B.S. Electrical and Computer Engineering** 

• **GPA:** 3.5/4.0

• Relevant Coursework: Analog Circuit Design and Analysis, Hardware Description Languages, Microelectronics, Computer Science (C/C++, Python), Digital Electronics and Design, Analog Signal Analysis, Power Electronics, Control Systems, Motor Drive and Control

University at Buffalo

Buffalo, New York

Graduated 2010

B.S. PhysicsGPA: 3.2/4.0Minor: French

# **Relevant Experience**

**UFM Systems LLC** 

Corvallis, Oregon

2013 – present

Embedded Systems Developer, Self-Employed

- Develop embedded hardware and software based on client needs
- Create and provide schematics and support documentation
- Design and lay out printed circuit boards
- Implement custom control and automation solutions
- Handle contracts, estimates, and financial transactions associated with running the business

Oregon State University

CORVALLIS, OREGON

2015 - 2016

**Teaching Assistant** 

- Taught electrical fundamentals to engineering students
- Guided students through lab exercises and equipment usage

Epik Electronics LLC

Buffalo, New York

. 2010 – 2012

- Web Developer
  - Developed and maintained an e-commerce exchange for consumer electronics
  - Managed web servers, database servers
  - Tasked with discovering and resolving any bugs in the back-end of the e-commerce applications
  - Automated the retrieval, organization, and maintenance of current inventory and pricing from various distributors

#### Technical Skills

Operating Systems (general purpose): Linux, Windows, MacOSX, BSD

Operating Systems (embedded): FreeRTOS, ChibiOS, RTLinux

**Languages:** C (system, application), C++, Python, PHP, Verilog, shell scripting (bash, tcsh, sh), SQL, Javascript **Software:** KiCAD, Eagle, Simulink, MATLAB, ngspice, LTSpice, Lattice Diamond, Apache, nginx, git, SVN

Architectures: x86, AVR, STM8, ARM (STM32, AVR32)

## Projects/Hobbies

**Brushless Motor Controller:** Designed for use in Oregon State University's energy-efficient electric vehicle entered in the Shell-Eco Marathon. Drives a 500W 3-phase brushless DC motor using vector control. The vehicle achieved a rating of 267 miles per kWh in the 2016 competition and 290 miles per kWh in 2017. (power electronics, PCB layout, embedded C)

**Induction Bike Light:** A rear light for my bicycle powered by recycled hard drive magnets attached to the spokes and a coil attached to the bike frame. A supercapacitor was integrated into the design so that the light can stay on for several minutes after pedaling stops. (low power circuits, SPICE)

**Sous Vide Temperature Controller:** An integrated unit for converting a crock pot or hot plate into a sous vide (precision temperature) cooker without modification to the original cooker. Designed to be a marketable product. (control systems, power electronics, sensors)

## **Community Service**

Flag Football Referee. Philomath Youth Athletic Club. 2014 - Present