

EDUCATION

Western Carolina University

Cullowhee, NC

B.S. in Electrical and Computer Engineering Technology; GPA: 3.62; Dean's List 2 semesters Aug. 2011 – May 2015

B.S. in Computer Science; Minor in Mathematics; GPA: 3.27; Dean's List 2 semesters Aug. 2012 – May 2016

EXPERIENCE

MWW On Demand

Hendersonville, NC

Software Developer (Full Stack)

Mar. 2017 - Present

- **JSON API & Web App:** Develop and maintain a globally used JSON API and web app that uses a wide range of technologies primarily including Ruby on Rails, EmberJS, and relational databases. Together, the API and web app serve as an interface to customers as a way to automate order submission as well as an interface to other 3rd party SaaS providers so that we can integrate with them and in-turn provide even more services to both our customers and ourselves. This overall system is designed to establish a cloud-based presence for the company to help meet a growing and globally expanding demand. Both externally and internally, it helps to streamline digital interactions with customers as well as the manufacturing process itself from start to finish.

Western Carolina University

Cullowhee, NC

Laboratory and Project Assistant - Electrical Engineering

Aug. 2015 - May 2016

- Oversaw engineering labs and classrooms, assisted on graduate and course projects carried out in the engineering and technology department (primarily with circuit design and PCB fabrication), as well as assisting engineering faculty on day-to-day activities.

RadioShack & Carolina West Wireless

Newland, NC

Technician & Sales Associate

May 2012 - Jan. 2016

- Offered customer service and aid in the sales of store products as well as troubleshooting and repairing electronic devices.

Avery County Schools

Newland, NC

IT Internship

Aug. 2010 - Jun. 2011

- Intern under my high-school's head IT technician (and former NASA engineer of 30 yrs.). My tasks included repairing computers, printers, TVs, projectors, taking inventory, building new computers for labs, installing wireless access points, among others.

PROGRAMMING SKILLS

- **Languages:** Ruby, Python, Javascript, Java, C/C++, Crystal, SQL, Bash, \LaTeX
- **Frameworks & Libraries:** Rails, EmberJS, React, Node, Amber
- **Technologies & Tools:** Git, Atlassian Software (Jira, Trello, Confluence), Passenger, Redis, Sidekiq, Capistrano, Material Design, Bootstrap
- **Methodologies:** OOP, MVC, TDD, Agile, Active Record

ENGINEERING SKILLS

Circuit analysis • Circuit design • PCB fabrication • Digital Signal Processing • MATLAB • Arduino • Raspberry Pi • Microcontroller interfacing • Motor control • CNC operation • 3D printing

OPEN SOURCE SOFTWARE CONTRIBUTIONS

- **Shippo Ruby Client:** A Ruby wrapper for the Shippo API github.com/goshippo/shippo-ruby-client
What I've done: Updated code to resolve deprecations, fixed bugs that were breaking an API call, improved tests
- **Zebra ZPL:** A Ruby gem for generating ZPL & printing to Zebra printers. github.com/bbulpett/zebra-zpl
What I've done: Added printing support for the Windows platform, added/fixed support for QR codes, fixed bugs

SOCIETIES AND ORGANIZATIONS

- Institute of Electrical and Electronics Engineers (IEEE) 2014 - present
(*Secretary of WCU Student Branch*)
- Association for Computing Machinery (ACM) 2014 - present
- WCU Robotics Club 2014 - 2016
(*Team programmer and electrical engineer*)
- WCU Computer Science & Math Club 2014 - 2016
- WCU Pride of the Mountains Marching Band 2011 - 2013

EXTRACURRICULAR

Astronomy • Astrophotography • German (proficient) • Robotics • Scripting & internet bots • Gaming
DIY electrical projects • Guitar • Hiking

REFERENCES

Available upon request