

EDUCATION

Western Carolina University

Cullowhee, NC

B.S. in *Computer Science*; Minor in *Mathematics*; GPA: 3.27; Dean's List 2 semesters

Aug. 2012 – May 2016

B.S. in *Electrical and Computer Engineering Technology*; GPA: 3.62; Dean's List 2 semesters

Aug. 2011 – May 2015

EXPERIENCE

MWW On Demand

Hendersonville, NC

Full-Stack Software Developer

Mar. 2017 - July 2020

- Developed and maintained a JSON API and web app built with technologies including: Ruby on Rails, Javascript, relational databases, among others.
- Developed custom engines and API clients for numerous customers and SaaS providers to seamlessly integrate their systems and services with ours.
- Developed many automated solutions for both internal and external use. These usually took the form of UIs, scripts (ruby/bash/python) managed by cron, Slack bots, mailers, and auto-generated spreadsheets.

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 circuit design and PCB fabrication), developed example programs in MATLAB and C, and assisted 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 and troubleshooting computers and other various hardware, managing inventory, building new PCs, installing wireless access points, managing network cabinets, among others.

PROGRAMMING SKILLS

- **Languages:** Ruby, Javascript, Python, Java, C/C++, SQL, Rust, Bash, L^AT_EX, Kotlin
- **Frameworks & Libraries:** Rails, NodeJS, EmberJS, React, Three.js, Android
- **Technologies & Tools:** Git, Cron, Postgresql, MS SQL Server, Redis, Capistrano, Sidekiq/ActiveJob, Celery, Passenger, Nginx, Atlassian Software (Jira, Trello, Confluence), Material Design, Bootstrap
- **Methodologies:** OOP, MVC, TDD/BDD, Agile development, ActiveRecord

ENGINEERING SKILLS

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

NOTABLE OPEN SOURCE SOFTWARE CONTRIBUTIONS

- **SpaceX Ruby Client:** Ruby library that consumes SpaceX API github.com/rodolfobandeira/spacex
What I've done: Implemented endpoint calls for (Specific, Past, & Upcoming) Launches + rspec tests for each
- **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: I am a maintainer of this gem. I've implemented and updated a lot of functionality including support for QR Codes, images, Windows platform support, and many many tests.

SOCIETIES AND ORGANIZATIONS

- Institute of Electrical and Electronics Engineers (IEEE) 2014 - present
(Secretary of WCU Student Branch) 2014 - 2016
- 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 • Computer Grapics • DIY electrical projects • Game development •
Gaming • German (limited working proficiency) • Guitar • Hiking • Robotics • Scripting

REFERENCES

Available upon request