

## EDUCATION

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### 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

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### MWW On Demand

Hendersonville, NC

*Software Developer*

*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, JavaScript, and relational databases which are all hosted on a cluster of Linux servers. 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 3<sup>rd</sup> 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

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- **Languages:** Ruby, Python, Javascript, Java, C/C++, SQL, Bash,  $\text{\LaTeX}$ , Kotlin
- **Frameworks & Libraries:** Rails, NodeJS, EmberJS, Three.js, React, Android
- **Technologies & Tools:** Git, Passenger, Redis, Sidekiq, Capistrano, Atlassian Software (Jira, Trello, Confluence), Material Design, Bootstrap
- **Methodologies:** OOP, MVC, TDD/BDD, Agile, ActiveRecord

## ENGINEERING SKILLS

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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

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- **SpaceX Ruby Client:** Ruby library that consumes SpaceX API [github.com/rodolfobandeira/spacex](https://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](https://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](https://github.com/bbulpett/zebra-zpl)  
**What I've done:** I am a maintainer of this gem. I've added and updated a lot of functionality including support for Windows printing, QR Codes, images, and many many tests.

SOCIETIES AND ORGANIZATIONS

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- 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

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

REFERENCES

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Available upon request