Bryan Walsh

Riverside, CA 92507 | (909) 510-2129 | bwalsh@engr.ucr.edu | *linkedin.com/in/walshbryanj*

EDUCATION

University of California, Riverside
Major: Electrical Engineering, B.S. (2020)
Focus: Intelligent Systems (Machine Intelligence & Robotics)
Notable Courses: Machine Organization & Assembly Language Programming, Logic Design, Embedded Systems, Linear Methods for Engineering Analysis and Design, Multivariable Calculus (I & II)

EXPERIENCE

Front End Developer **BioHack @ UC Riverside** **Jan. '19 – present**

- Design & maintenance of the BioHack website involving JavaScript, CSS, and HTML.
- Implemented event application forms with data analytics in preparation for the hackathon.
- Collaborating with university professors to host hackathon workshops on the topics of Github, Python, professional development, and others.

Front End Developer **Lady St. Lucia** **Feb. '17 – June '18**

- Transitioned the company's web platform from WordPress to BigCommerce. *goo.gl/G1w63s*
- Served as the mediator for translating the business team's goals into functioning solutions.
- Integrated analytics platforms and social media marketing solutions to improve audience interaction and learn from customer behavior. (Facebook Pixel, Instagram Shopping, etc.)
- Implemented Search Engine Optimization (SEO) for the webpage and its products.
- Leveraged knowledge with WebDAV, HTML, CSS, and user experience/interface design.

PROJECTS

Wallpaper Scheduler for Reddit (Android Application) *goo.gl/jrCDWM*

- Developed an Android app using Java and XML that automates device wallpaper cycles with images from Reddit.com. Featured on numerous news sites such as Gizmodo BR, XDA, and others. 250+ daily active users.
- Implemented image processing methods using Renderscript for Gaussian smoothing and alpha compositing.
- Designed a custom parsing algorithm with asynchronous tasks to return JSON data from Reddit in ~35ms.
- Leveraged knowledge in Java, XML, Android SDK, image processing, JSON, and structured data parsing.

Thrifty Thermostat (IoT Embedded Device, Smart Home Automation)

- Built a device using Python and electrical components to remotely control an HVAC system from a phone; uses a Raspberry Pi Zero W and a Telegram Bot to execute commands and control relay switches.
- Replaces a standard thermostat as a budget Wi-Fi thermostat using only $10 in parts.
- Leveraged knowledge in Python, electrical systems, Node.js

Colorblind Assistant (Embedded Device)

- Designed a device that can determine an object's color and output it as an RGB value and musical pitch.
- Programmed a color sensor to scale light with sound frequency and calculate red, green, and blue presence.
- Leveraged knowledge in C, electrical & embedded systems, and with Atmel Studio.

SKILLS

Programming Languages:

Proficient: Java, C++, HTML, CSS

Familiar: Python, Assembly Language (RISC), JavaScript, C, Kotlin, MATLAB, Verilog

Software/Frameworks: Atmel Studio, Android Studio, Android SDK, Git, WebDAV, JSON, Firebase, Adobe Photoshop & Premiere, Microsoft Office