Brogan Miner

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EDUCATION

Oregon State University

B.S Electrical and Computer Engineering (Computer Science minor)

Corvallis, OR June 2020

WORK EXPERIENCE

OSU Sustainability Office

Student Software Systems Engineer

May 2018 - Current

- Designed web applications for viewing building energy data and analyzing personal carbon footprints
- Full stack web development
- · Test driven development and continuous integration
- · Maintained and managed databases
- Integrated projects with AWS services

PROJECTS (github.com/broha22)

Discrete DRAM Module

System Verilog/Electronics/PCB Layout

- Three-person project entailing making a 40-bit DRAM module from discrete components.
- The module was made to work with an FPGA operating at ~50MHz

OSU Energy Dashboard

HTML/CSS/JavaScript/Node/Vue.js/MySQL

- Web application for the viewing of real time utility tracking
- Troubleshooting of automation systems hooked up to utility meters
- Node.js backend hosted on AWS EC2
- Continuous integration with Travis CI and automated testing with Browser Stack
- Presented at Washington Oregon Higher Education Sustainability Conference 2019

Six-Legged Robot

C/Arduino/3D Modeling/Objective-C

- Leg movement is controlled via 18 servos on the robot, the servos are controlled through an I2C PWM breakout board connected to an Arduino like board
- The Arduino like board is controlled remotely through a BLE connection to an iOS app

TECHNICAL SKILLS

- Language/Framework: C/C++, Python, HTML/CSS, JavaScript, MySQL, git, Objective-C, System Verilog, Node.js, LATex, Express, Vue.js
- Classes: Digital Logic Design, Data Structures, Electrical Fundamentals, Electronics, Assembly & Computer Organization, Signals and Systems