

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
- Presented at WOHESC 2019 and AASSHE 2019 on the principles of managing and finding student developers to help build software oriented towards sustainability.

Keysight Technologies

QA Engineer Intern

April 2019 – September 2019

- QA of Wi-Fi Test Systems
- Automated network analysis and packet capture to validate protocol adherence to 802.11 a/b/g/n/ac
- Developed internal tool web applications used to monitor and allocate resources
- Worked with firmware developers to track and fix bugs
- Developed automated system level tests with Python

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
- Analyzed and characterized memory cell wave forms for read and write operations
- Calculated dynamic power usage and error rate of the system

Six-Legged Robot

C/Arduino/3D Modeling/Objective-C

- Robot moved using 18 servos
- Servos controlled by I2C breakout board
- Main robot control through Arduino like board with Bluetooth low energy module
- Control of the robot was done from a MacBook pro interfacing with the BLE module

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, Digital Image Processing, Computer Architecture, Microcontrollers