Justin W. Olson

863 S. Nelson Way **www.Github.com/JustinWayneOlson** **720-261-9855**
Lakewood, CO 80226 **Justin.Wayne.Olson@gmail.com**

EMPLOYMENT HISTORY

Seagate Technology – Software Engineering Intern
Summer 2016

- Systems Integrated Engineering and firmware testing.
- Wrote bash scripts to perform static code analysis for their in-house scripting language.
- Wrote a JSON parser (python) to parse machine-readable logs into a PostgreSQL database
- Designed and wrote a full stack web-application for displaying searching and analyzing the logs.

University of Colorado Boulder - Research Assistant **Fall 2015 - Fall 2016**

- Responsible for the planning, development, and implementation of gathering useful data from students related to their experiences with courses and professors
- Parsing, analyzing and presenting the data gathered to help the student population voice their positive and negative opinions
- Learning the basics of every element of the full software development stack

EchoStar Corporation – Embedded Systems Software Engineering Intern **Summer 2015**

- Aided in the research and development of an efficient file-system for a Linux based DVR
- Mentored a high school robotics competition, instructing in the basics of physics, mechanics, and functional programming
- Student Ambassador at the University of Colorado

University of Colorado Boulder - Computer Science Learning Assistant **Spring 2015 - Present**

- Responsible for guiding and educating students in a course of over 300 computer science students
- Tutored students on projects in Python, C, and C++, as well as coding standards, Linux, and various text editors and development environments

EDUCATION

University of Colorado at Boulder
2013-Present

- Seeking a Bachelor's of Science in Computer Science Engineering
- Expected Graduation Spring 2017
- Relevant Coursework: Artificial Intelligence, Machine Learning, Human Centered Computing, Database and Information Systems, Scientific Visualization, Numerical Computation, Principles of Programming Languages, Operating Systems, Computer Systems, Data Structures, Software Development Tools and Methods, Algorithms, Robotics, Calculus II, Discrete Math, Linear Algebra, Physics II, Statistics

TECHNICAL SKILLS

Languages and Frameworks

- Python,C, GDB,C++, Java, Arduino C, Bash, JavaScript, HTML, CSS, RethinkDB, MySql, PostgreSQL, MongoDB, Meteor, React, Ruby on Rails, Tornado

Software

- Github, ClearCase, and Perforce
- Vim
- Various Linux distributions, Mac OS, and Windows
- Technical Computing with MatLab, Mathematica, Sage, and Julia

ACCOMPLISHMENTS

Eagle Scout **December 2010**

- Nearly a decade of gathering life skills, leadership experience, and project management.
- Designed, fundraised, planned, and built a 10'x10' permanent bus stop at Dinosaur Ridge in Morrison, CO.

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RELEVANT PROJECTS

Equip - www.equip.ninja **Fall 2015 - Fall 2016**

Objective - Create a research focused web application for classroom observations.
Skills Used - Javascript, HTML, CSS, MongoDB, meteor.js, jQuery
Contribution - Full stack web development, user centered design.

RateMyBuffs - Search RateMyBuffs on the chrome store **Spring 2015**

Awards - 2nd Place Hack CU annual hackathon project
Objective - RateMyBuffs is a Google Chrome extension for CU's course enrollment. CU conducts surveys at the end of each semester gathering reviews from students about each course and professor. The extension takes this information and displays it next to the course during online enrollment.
Skills Used - JavaScript, HTML, CSS, basic web server and database interaction
Contribution - Wrote the main JavaScript responsible for parsing the web page the user is on to identify which courses and professors the user was viewing, looking up the respective data, and injecting it as new HTML code into the page.

Memory Oracle **Spring 2015**

Objective - The goal of Memory Oracle was to create a web-based frontend for GDB that allows more efficient debugging of C and C++ code. Memory Oracle displays information about the current state of the memory stack, the source code, and a customizable debugging interface.
Skills Used - JavaScript, HTML, CSS, Python, C, C++ ,web sockets, GDB, understanding of memory architecture
Contribution - Designed and wrote the front end. This involved creating a dynamic web page that would interact with web sockets to display source code, graphs, and process information.

Flappy Board - http://www.popsci.com/skateboard-folds-half **Spring 2014**

Awards - Published in Popular Science Magazine (July 2015), Best in class freshman projects
Objective - Developed a skateboard made from a compressible material. When vacuum suction is applied the board would stiffen to bear the weight of a rider. When the pressure is released it could be rolled up and stored in a backpack.
Skills Used - Physics (Mechanics, Statics, Dynamics), project planning, basic electronics.
Contribution - This project was done in a group consisting of a variety of engineering majors. My role in the project was design, and proof of concept. I theorized different materials, and calculated tensile and shear strength of the compressed layers to prove that it could support the weight of a rider.

Additional project information and references are available upon request