

Education

Washington University in St. Louis

August 2015 - May 2018

Master of Science in Computer Science

Bachelor of Science in Computer Science, Minor in Electrical Engineering

St. Mary's College of California

September 2012 - May 2015

Bachelor of Arts in Liberal Arts, Physics/Engineering Focus

Technical Skills

Skilled:

Java, Arduino C, HTML, CSS

Working Knowledge:

JavaScript, MongoDB, Express.js, AngularJS, Node.js, Git

Basic Knowledge:

Ruby on Rails, Python, MATLAB

Experience

Washington University in St. Louis – St. Louis, MO

Head Teaching Assistant (Data Structures and Algorithms)

November 2016 – Present

- Manage student repositories, TA scheduling, hold office hours, recitation, answer student questions

Freelance Web Development

August 2016 – Present

- Consult with clients to discuss wireframes, website goals, SEO keywords, and optimum functionality
- Design and deploy web sites including writing and editing functional pages that allow user interaction

G3 Enterprises - Modesto, CA

Engineering Intern, G3 Corporate Engineering

June 2016 - August 2016

- Constructed detailed floor plans of plant and machine layout and designed duct system to transport waste
- Designed HMI and PLC for cork printing automated machinery and transformer room information panels
- Created SOP for refractive window dryer with step-by-step testing protocol and diagrams for easy use by operator
- Analyzed cap transportation; implemented feeding change resulting in 40% improvement of yield

Engineering Intern, Mobile Bottling Division

June 2014 - August 2014

- Assisted bag-in-box wine trial; reduced dissolved oxygen introduced to the product by 20% of industry standard
- Created bottling process revisions to eliminate choke points caused by inefficient machinery or time management

E&J Gallo Winery - Modesto, CA

Control Systems Engineering Intern, Corporate Engineering

June 2015 - August 2015

- Designed PLC system to automate wine tank ON/OFF valves and flow pressure during product cycles and cleaning
- Relocated and organized plant machine set variables in Excel by pulling data from control database and archives

Engineering Intern, Global Customer Services and Logistics

June 2012 - August 2012

- Organized and led Kaizen to evaluate a systematic error in international processing and improved process time by 60%

Gallo Glass Company - Modesto, CA

Engineering Intern, GGC Engineering

June 2013 - August 2013

- Led research, scope of work writing, and contracting for \$300k project to reuse water and create zero discharge facility
- Formulated solution to machine error in product packing, created write-up and implementation program
- Constructed electronic library for all manufacturing plant manuals

Projects/Extracurricular Activities

Class Advisor Web App

October 2016 – Present

- Developing MEAN Stack web application to connect WUSTL students for class registration mentoring/advice

Twitter4J Research Project: Using Twitter API for Geolocation

September 2016 - Present

- Developing Java tool with Twitter4J library, Twitter API to map tweet geolocation data to webcams via RESTful API

Echocardiogram Design Project

February 2016 - May 2016

- Demonstrated ECG use of human heart as voltage source; constructed amplifying circuit with grounding, common-mode voltage filtering, Wilson's central terminal to convert heart signal to ECG waveform viewable on a computer