DAVID RANGEL ALARCON

drangelalarcon@gmail.com ◇ (408) 221-2214

WORK EXPERIENCE

OpsRamp, Inc Dec 2019 - Apr 2020
Software Engineer *San Jose, CA*

- Worked with an Agile team on a machine learning module consisting of Python, Docker, MySQL, Kafka, etc.
- Developed, implemented, and tested a statistical algorithm using conditional probability that improves the output of an unsupervised Keras sequence classification model.
- Sped up model training times by making more use of pandas and numpy libraries to vectorize key functions.
- Improved the code base by adding unit testing, adding memory monitoring, fixing memory leaks, fixing input handling from both Kafka messages and API call returns, repairing MySQL scripts, and general code cleaning.

Performance Star LLC Feb 2019 - Dec 2019
Software Engineer *Santa Clara, CA*

- Worked on an intelligent recipe generator for chemical vapor deposition equipment. Recipes are command sequences generated from a user's desired process, tool, and yield goals.
- Unified and refactored separate Python Flask code bases into a single application, making the application shareable as a docker image. The UI collects form inputs and inputs from a custom pareto front GUI and outputs a synthesized recipe.
- Created an SQLite3 database and python/prolog interfaces for storing and accessing data.
- Optimized and generalized a prolog search problem which synthesized the recipe order.
- Developed a flask web app tool for visualizing and stepping through a prolog search problem.

Keysight Technologies Jul 2014 - Sep 2017
Electrical Engineer (New Product Introduction) *Santa Rosa, CA*

- Developed calibrations and tests in C# for spectrum analyzers and signal generators; alc control, signal to noise, RF gain, spur searches, filter roll off, etc.
- Optimized signal generator performance by benchmark testing and analyzing data using Python and C#.
- Saved days of engineering time by implementing a shareable spur search and classifier library for signal generators.
- Designed and distributed troubleshooting backplane-extender board using internal PCB layout tool.
- Reviewed prototypes and specified modifications to fix bugs stemming from hardware and software design.
- Maximized throughput of our production process for products by identifying root causes and fixing them.
- Improved hardware yields by 40% by revising noise specifications to match production statistics.
- Modified test stations to ensure required precision and accuracy required by our product specifications.

EDUCATION

University of California Los Angeles Sep 2017 - Dec 2018
Masters ◇ Computer Science GPA: 3.74

University of California Davis Sep 2010 - Jun 2014
Bachelors of Science ◇ Electrical Engineering

School Projects Arduino CWFM Radar, Bayesian Networks on Medical Data, MNIST Adversarial Images

SKILLS

Computer Languages	Python, C#, C, Java, Bash, Matlab, SQL, Prolog, Javascript
Software	Git, TFS, SVN, Visual Studio, PyCharm, Sublime, LaTeX, Docker, Google Cloud, Linux, MacOS, Windows, Microsoft Office
Equipment	Spectrum Analyzers, Signal Generators, Network Analyzers, Oscilloscopes

US Citizen, Speaks Spanish