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EDUCATION

UC IRVINE

2014 – 2016

B.S. Computer Science

Specialization: Information

LANGUAGES + SKILLS

LANGUAGES

PHP ●●●●●
Java ●●●●●
Python ●●●○○
JavaScript ●●●●●
C++ ●●●●○
C ●●○○○
Matlab ●●●○○

DATABASES

MySQL
MongoDB
PostgreSQL
Redis

LIBRARIES / FRAMEWORKS

Node.js
React.js
SASS
Laravel

ADDITIONAL SKILLS

HTML
CSS
AWS
Git
LaTeX
Jenkins

EXPERIENCE

LEASECALCS   July 2016 - Present

Senior Software Engineer

- Developed and documented an extensible REST API that allowed clients to easily query data points, import data structures into the application using simple facades, export financial data such as journal entries and rent payments to feed into Oracle, SAP, and other ERP systems, and build out business intelligence dashboards relating to all forms of corporate real estate data and calculations.
- Optimized major components within the application by more than 500% by refactoring application logic, improving database queries, and setting up a caching interface in PHP that let other developers easily cache structures, calculations and more in Redis with a secondary caching layer in MongoDB.
- Modernized infrastructure with AWS, set up unit and regression testing with Jenkins and PHPUnit, and created deployment pipelines to speed up application development and deployment.
- Migrated client's legacy data from various databases and files, into a generalized format that could be loaded into LeaseCalcs's application, allowing clients with large lease portfolios to quickly and easily start using the system for financial accounting.

NASA JPL & UC IRVINE   October 2014 - November 2016

Programmer

- Developed a binary file format named ARCH that stored matrices, vectors, and scalars, as well as the sizes and names of each data type.
- Created interfaces in MATLAB, Python, JavaScript, and C++ that enabled scientists to write and read formatted data to and from ARCH files.
- Profiled the Ice Sheet System Model (ISSM) using XCode Instruments to determine the most time-consuming operations that could be optimized and improved upon and optimized the most time-consuming operations in C++.

PROJECTS

IMDB REPLICA | Java

- Used Java to implement a data access object pattern that connected to a MySQL database and served information to JSP pages using servlets.
- Implemented auto-complete search functionality with AJAX, jQuery, and MySQL.

PRODUCTIVITY RASPBERRY PI BOT | Python

- Programmed a motorized RC car using a Raspberry Pi equipped with motion sensing capabilities, with the purpose of driving away when one reaches for their phone placed atop it.
- Built out and connected most circuitry, motors, and batteries using a breadboard, and programmed the motion control sensor using Python.

ZOTRANK | React / Node.js

- Worked with a team to build a UCI-oriented rate my professor, with custom filters, tags, and other information that applied to both teachers, and specific classes.
- Used React to render specific components about class ratings, teacher ratings, and student comments, all fetched from MongoDB using Node.js.