

HERNÁN STEVE CHALCO

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Oakland, CA

Summary

Software Engineer and Berkeley Math graduate looking to simultaneously learn and turn out clean/reusable code for ambitious tech company. Highly motivated with an inherent passion for learning and solving complex algorithmic challenges.

Education

University of California, Berkeley – Graduated December, 2017
B.A. Mathematics

Skills

Computer Languages

Proficient with Javascript, HTML, CSS, Java, C++, relational (MySQL) and non-relational databases (NoSQL), with experience using Python and Matlab

Completed courses in technical topics:

C++, Objective-C, Data Structures, Numerical Analysis, Linear algebra, Elementary Analysis, Complex Analysis, Calculus, Mechanics, Electromagnetism

Additional Skills:

Ability to analyze and communicate complex technical information. As well as works' well in a team setting.

Spanish Fluency

Libraries and Tools:

Bootstrap, jQuery, React, React Native, Node.js, Firebase, Selenium, Visual Studio Code, Github, Xcode, Jira, Dynatrace, Confluence, Splunk, and Akamai Luna

Projects & Relevant Experience

REPORT AUTOMATION

- Used Selenium with Chrome web driver to automate report analytics
- Implemented robust/reusable code in java, that was subject to object oriented best practices

COMPUTATIONAL RECONSTRUCTION OF PROTEIN STRUCTURES THROUGH CRYOELECTRON MICROSCOPY

- Responsible for the translation and analysis of the mathematical model necessary for the composition of 2D images in Fourier Space. In doing so, bridging the gap between theory and practical application.
- Completely responsible for the code behind the “stitching” of 2D images in order to render a 3D reconstruction of protein structures.

NUMERICAL ANALYSIS IMPLEMENTATIONS (MATLAB)

- Responsible for the mathematical analysis and implementation of algorithms that approximate the solutions to systems of linear equations, such as Gauss-Seidal and Jacobi.
- Ensured the convergence of iterative techniques used to approximate solutions to ordinary differential equations. Subsequently implemented said techniques on Matlab.
- Responsible for the implementation of computational techniques for locating eigenvalues.

Work History

SOFTWARE ENGINEER - HCL TECHNOLOGIES

October 2018 – present

- Responsible for maintaining and debugging full stack code in production environment
- Gained extensive knowledge on the scalability of system architecture
- Developed automated system tests to ensure the health of the site infrastructure