José Saldivia

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Education:

University of California Santa Cruz June 2024

Bachelor of Arts in Computer Science, GPA 3.2

De Anza Community College June 2021

Associate of Science in Computer Science, GPA 3.7

Technical Skills:

Languages: C/C++, Python, Java, Kotlin, Flutter, JavaScript, Typescript.
Frameworks: React, NodeJS, Express
Data Management: PostgreSQL, MongoDB, Django
CourseWork: Data Structures and Algorithms (DSA), Analysis of Algorithms, Natural Language Processing(NLP), Compiler Design, Computer Architecture, Software Documentation

Projects:

Text Classification and Named Entity Recognition Project June 2024

- Developed text classifiers to perform sentiment analysis on IMDb movie reviews without using pre-existing natural language processing libraries, focusing on distinguishing positive and negative sentiments in text.
- Improved the model by integrating long short-term memory (LSTM) units to overcome vanishing gradient problems, enhancing the model's capacity to handle long-term dependencies in text.
- Conducted a detailed analysis comparing the effectiveness of RNN and LSTM models on training and test datasets, providing comprehensive documentation of model performance and experimental results.
- Documented all findings and analyses in LaTeX for clear, professional presentation and reporting.

Compiler Design Project June 2024

- Designed and implemented a compiler to transform high-level code into low-level code using Python and C.
- Developed modules for lexing, parsing, intermediate representations, and optimizations using data structures and algorithms (DSA) and regular expressions (regex).
- Utilized context-free grammars to define the syntax rules of the programming language and implemented efficient parsing techniques to convert high-level code into an abstract syntax tree (AST).
- Created and executed comprehensive test suites to validate each compiler module, ensuring robustness.
- Used Docker for a consistent development environment and GitHub Classroom for automated feedback and version control.

Developed and Deployed: Full-Stack Gmail Clone July 2023

- Designed and implemented an email management system using React for the frontend, Node.js and Express for the backend, and MongoDB for database management.
- Incorporated features such as real-time email syncing, multi-user support, and advanced search functionalities.
- Ensured code quality and maintainability by using ESLint for linting.
- Implemented unit testing with Mocha (testing framework for Javascript running on Node. js).

Volunteer experience:

Software Engineer at Human Agenda: Non-Profit Organization June 2024

- Rebuilding the front end of the organization's website using React.js.
- Upgrading the version of Squarespace to the latest release (7.1).
- Creating instructional videos for staff to guide them on creating events and new pages.

Community Manager: 2021- 2023

- Launched and supervised a dynamic platform to address educational disruptions in STEM fields.
- Coordinated educational resources and led regular meetings to promote adaptability and address evolving needs.
- Established a thriving community that significantly enhanced educational access and support for over 300 participants.
- Fostered robust engagement and resource sharing, creating a lasting network of support and collaboration.
- Helped mitigate the impact of the pandemic on students' education by providing continuous access to resources and support.