

Education:

University of California, San Diego | B.S. Computer Science |
Overall GPA: 3.456 | UD Major GPA: 3.717

Interests: Android and Web Development, Operating Systems, Machine Learning: Recommender Systems and Classification, Database Systems

Skills:

Advanced | Java, C#, Python, JavaScript, Node.js, ReactJS, Spring Boot, Express, Java Server Pages (JSP), SQL, PostgreSQL, MongoDB, Firebase, Insomnia

Familiar | C++, C, Pandas, Numpy, Android, AngularJS, JQuery, JDBC, Haskell, Lambda Calculus

Work Experience:

July 2021 – PRESENT

General Motors | Full Stack Software Developer

- Conducted research and implemented an effective solution for censoring a user's personal information in the server logs such as email, name, vehicle ID etc. Required an understanding of which services in the backend are logging personal information and an understanding of how logging is done in the backend using the Spring Boot framework.
- Converted required database fields to optional fields to better serve the vehicle dealers when enrolling a new vehicle to OnStar. Involved modifying the frontend's form validation and modifying the backend's database constraints.
- Efficiently tested backend code changes using the Insomnia API client to confirm the expected responses for the relevant endpoints that call on the modified backend code.
- Integrated HashiCorp vault into the backend in order to securely store application data.

September 2020 – December 2020

Bentley Systems | Software Engineer Intern

- Created unit tests using C# and the Moq testing framework, resulting in increased code coverage throughout the codebase.
- Converted Angular webapp pages such as User Acknowledgment and Custom Dashboard to its React equivalent. Integrated React Redux into the React pages to better maintain component states.
- Researched and began the implementation of an Angular router that redirects to both Angular and React pages. Researched multiple libraries and conducted tests on seeing which implementation worked best, presented results to the team.

Projects:

July 2020 – November 2020

Mom & Pops | Personal Project, Full Stack Developer, <https://github.com/jorge-aparicio/MomPops>

- Worked on an Android app that allows users to find local restaurants to support. Tech Stack: Android, Java, Postgres.
- Designed the database using an E/R diagram. Algorithmically converted the diagram into a relational database.
- Created the cart page that displays the user's current cart along with the total price. Additional functionalities include clearing the cart, saving their cart, and viewing previous carts for user convenience.
- Implemented the Clicked Restaurant page that displays the menu of the clicked restaurant.

March 2020 – June 2020

Kiwi Form | Software Engineering Course, Project Manager and Full Stack Developer

- Led a team of ten developers in an Agile environment to develop a specialized forum web application for a software engineering course. Tech Stack: ReactJS, NodeJS, Express, Firebase
- Created the database schema, added navbar functionality that allowed employees to list/change the specialization by which their forum was filtered by, and created/tested RESTful API for CRUD operations on the database.
- Developed the authentication system using Express, Firebase, and cookies to allow employees and admin authenticated backend routes and pages. Created a secure employee invite system that emails a unique one-time-only invite link to a specified employee's email that would grant access to the admin's company forum.

March 2020 – June 2020

College Course Registrar | Databases Course Project, Full Stack Developer

- Developed a college course registrar web application that allows students to plan their schedules, enroll in classes, view their academic history etc. Tech Stack: JSP, Java, JDBC, Apache Tomcat, PostgreSQL.
- Created and optimized SQL queries using materialized views to allow efficient retrieval of data such as finding available dates for a professor to schedule a review session, finding nonconflicting classes for a student's current schedule and more.
- Modeled the database using an E/R diagram, maintained the database using integrity constraints, triggers, and materialized views.