

EDUCATION

University of California, Santa Cruz

Sep 2020 - Jun 2024

Bachelor of Science, Computer Engineering - GPA: 3.76/4.0

Courses: Data Structures and Algorithms, Assembly, Programming Abstractions, Multi-variable Calculus, Computer Architecture, Logic Design, Principles of Computer Systems Design, Electronic Circuits, Computer Networking, Intro to Software Engineering, Embedded System Design, Hardware Design

WORK EXPERIENCE

Group Tutor and Grader @ UC Santa Cruz

Mar 2021 - Present

- Supported 150+ students in debugging Assembly via 1-on-1 Zoom calls 5 days a week for 3 hours over 3 quarters
- Resolved Verilog errors for 300+ students in two 4-hour lab sessions each week for 3 quarters
- Evaluated assignments and assessments for nearly 300 students over the course of 1 quarter

Software Engineering Intern @ CDK Global

Jun 2023 - Sep 2023

- Revamped order step user interface to distinguish preorders from orders for all 224 Hyundai Canada dealers
- Created a new API endpoint to retrieve lender program data from Roadster's CalcEngine, utilizing provided auto loan and lease parameters including credit scores, terms, and annual mileages
- Streamlined user interface changes to lender programs comparison modal to support the addition of new data pulled and calculated by new API endpoint; resulted in a 109% increase in hits
- Generated nearly 800 hits on the compare lender programs modal across 320 dealers in 3 months

Software Engineering Intern @ CDK Global

Jun 2022 - Aug 2022

- Facilitated the capability for generating invoices for "other" payments and processing refunds using the Stripe API across 2805 integrated dealerships
- Maintained Shift certification by porting code that sent LivePerson analytics for all live chat actions on all Roadster supported dealerships to Shift
- Developed an algorithm to auto-generate content security policies on page load for hundreds of dealerships to improve security for Roadster payment slideouts
- Collaborated with a team of 5 on a mobile application for Roadster's dealer management website for company wide hackathon

PROJECTS

Don't Fall

Verilog, Basys3, Vivado

- Engineered a captivating single-player game on the Basys3 board, challenging players to navigate around randomly sized holes, collect coins of varying heights, and control jump height by pressing and holding the U-button
- Produced randomness for game components using 8-bit linear feedback shift registers
- Employed game logic using only basic logical operators and 2 state machines to control the player and the coin

Tassel

JavaScript, HTML/CSS, React, AWS Amplify, GraphQL, DynamoDB, S3

- Spearheaded a team of 7, I seamlessly integrated in-app messaging and a machine learning-based recommendation engine into Tassel, while also organizing weekly meetings with sponsors to showcase the progress of our features
- Introduced an innovative friend request system, enabling all 120,000 alumni to seamlessly connect with each other
- Established in-app messaging using Amplify's Datastore functions and a GraphQL schema for efficient data querying

Vroomers

JavaScript, HTML/CSS, React, Firebase

- Enabled secure login and account creation using Firebase authentication and cloud functions
- Implemented a map interface using Google Maps API to display all scheduled events and user's location
- Incorporated Firebase cloud functions to facilitate event management and incorporated Material User Interface tabs to design a comprehensive Events page for streamlined functionality

SKILLS & AWARDS

Languages

Ruby on Rails, Python, C/C++, HTML/CSS, JavaScript, Verilog, Java, Scala, Chisel

Miscellaneous

Git, Linux, React, TypeScript, Vue, Firebase, AWS Amplify, GraphQL, S3, DynamoDB

Awards

Dean's Honors List (Sep 2020 - Present), Eagle Scout (Apr 2019), Tau Beta Pi