

Richard Luong

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EDUCATION

University of California, Riverside

June 2019

Bachelor of Science, Computer Science

Coursework: Data Structures & Algorithms, Database Management Systems, Computer Security, Computer Networks, Software Construction, Data Mining & Machine Learning, Computer Graphics, Embedded Systems

SKILLS

Languages: C++/C, Python, JavaScript, HTML/CSS, TypeScript

Frameworks/Libraries: React.js, Node.js, Express, Bootstrap, jQuery

Databases/Tools: Git, PostgreSQL, MongoDB, npm, GraphQL, Postman, Apollo

SOFTWARE ENGINEERING EXPERIENCE

Home Mobile Website

June 2020 - July 2020

- Designed and built a full-stack web application inspired by Airbnb which allows users to book or host homes around the world
- Incorporated ant-design components with React to create a dynamic, modular front-end/UX design
- Integrated Google's Geocoding API to geocode location queries from the client
- Utilized Apollo and GraphQL with Express to handle client-side requests and server responses
- Added Stripe's Connect API for payment services
- Improved code quality, maintainability, and development time by using TypeScript features such as static type-checking, object-oriented structure, compile time error checking

FPS Game Team Project

April 2019 - June 2019

- Collaborated in team of four to build a first-person shooter video game in Unity
- Utilized Git/Github with multiple branches to handle version control
- Updated the game according to user feedback gained in testing during development
- Adopted the Agile Methodology to enhance project management by utilizing development sprints and burn-down charts
- Facilitated sprint planning/review, and team communication to ensure that the project progress was synchronized with the project timeline.
- Wrote scripts in C# to implement UI features like player variable tracking and menu component functions

Airline Management System

April 2019 - June 2019

- Designed and translated a logical model of an airline management system into a PostgreSQL relational database based on the ER Model to provide airlines with an internal system to track information
- Created a user interface in Java that allows users to query and update airline data
- Converted user input to execute corresponding PostgreSQL CRUD operations

LED Matrix Pong

July 2018 - August 2018

- Programmed the video game Pong onto an 8x8 LED matrix and an AVR microcontroller
- Deployed state machines in C to program the game logic and opponent AI
- Wrote end-to-end tests with Atmel Studios Debugger to debug hardware and software bugs

Chat App

September 2018 - December 2018

- Developed a messaging app using Python and Mininet's Python API
- Programmed real time communication/messaging by utilizing socket programming and creating a custom topology with Mininet's API to emulate a virtual client-server network