Raymond Lang

San Francisco, CA

raymond.w.lang@gmail.com | github.com/raymondlang | raymondlang.com | 415.913.9393

Skills

Python, React.js, SQL, Node.js, Express.js, MongoDB, JavaScript, jQuery, Redux, Flask, Alembic, PostgreSQL, Git, HTML5, CSS3, Webpack, Heroku, TDD, Docker, Object Oriented Design, Google Analytics 4, Salesforce

Projects

ByteBud (Flask, Python, React, Redux, Alembic, PostgreSQL, Socket.IO)   *Live | Github*

Discord-inspired app allowing users to create servers to interact in real-time with their communities

- Utilize **websockets with Socket.io** to implement real-time messaging in channels between members of the channel's server
- Develop the application's backend using **Flask** as framework to allow for flexibility and simplicity while scaling app
- **RESTful API endpoints** for Create, Read, Update, and Delete operations for users, friends, servers, channels, messages, and reaction

Tripster (MongoDB, Express, Node, React, Redux)   *Live | Github*

Single-page application with interactive messenger that allows registered users to plan trips with other users with ease and organization

- Generated fully specified backend built with **Node.js, Express.js and MongoDB**
- Devised **data structures in MongoDB** to ensure trip pages were private, granting authorized user permission to add users, comments, and itinerary items
- Integrated **Redux Toolkit** unidirectional data flow to create predictable, normalized state and **reliable DOM rendering** for efficient load access to trips based on logged-in user

Connectify (MongoDB, Express, Node, React, Redux)   *Live | Github*

Web application that allows users to share posts/photos and interact with friends

- Create top level authentication component, using **JWT** and custom authentication logic to dynamically allow user access
- Designed and modeled the application's data using **MongoDB**, creating efficient **data structures and relationships** for optimal storage and retrieval
- Implemented a flexible and customizable **color theme system**, including support for dark mode, to enhance the visual appeal of the application

Serpent VS Square (JavaScript, HTML5, CSS3)   *Live | Github*

An HTML canvas auto-runner game

- Engineered custom collision detection **algorithms** and physics for player movement and seamless gameplay
- Designed snake **movement algorithm** and **custom event listeners** for smooth and responsive UI animation

PROFESSIONAL EXPERIENCE

Marketing Data Analyst   *San Francisco, CA*

Precision for Medicine   March *2021 - present*

- Developed centralized **Power BI** dashboard utilizing **SQL** to streamline execution management for **100+ users** and integrated real-time insights with **DynamoDB**
- Wrote **Python** code to efficiently extract and process **100+ codes** from data lake, integrating into pipeline
- Increased user engagement **20%** using **Google Analytics** to implement customer segmentation strategies

Quality Improvement Analyst   *San Francisco, CA*

Department of Public Health, San Francisco   *June 2018 - Dec 2019*

- Designed **Excel models** to analyze datasets with **100K+ points** with characteristics in operations and fiscal policy
- Produced **PowerBI** dashboards to monitor month-to-month resource allocation by department
- Assessed resource utilization of program serving **500+** persons experiencing homelessness, saving **20+ staff 1.5K+ hours/year**

EDUCATION

App Academy Open   *San Francisco, CA*

1000-hour full-stack software engineering course   *October 2023*

- Topics: React, Rails, SQL, JS, Git, Github, Express, MongoDB, NodeJS, Webpack, TDD, OOP, REST, and security

Boston College   *Magne Cum Laude*

B.S. in Molecular Biology | Minor: Computer Science

- Design & Analysis of Algorithms, Database Systems, Information Visualization, Bioinformatics, Statistics

University of California, San Diego   *Incomplete, 2019*

Doctor of Medicine Candidate