Srujan Rao

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Education

The University of British Columbia Vancouver, B.C.
Bachelor of Science, Computer Science *Aug. 2019 – May 2024*

- **Dean's Honour List** (3/4 Academic Years)
- **Relevant Coursework:** Data Structures and Algorithms, Software Design and Development, Machine Learning, Artificial Intelligence, Databases, Data Science, Internet Computing, Computer Hardware and OS

Technical Skills

Languages: C, Java, R, Python, JavaScript, TypeScript, SQL, HTML/CSS
Frameworks: React, Node.js, Flask, Jest, Mocha, JUnit, Cypress, FastAPI, Spring Boot, Express
Developer Tools: Git, GitHub, Linux, Unix, Docker, Amazon Web Services, Microsoft Azure, Visual Studio Code, IntelliJ IDEA, OpenAPI/Swagger, Jupyter, MySQL
Libraries: Chai, Pandas, NumPy, MongooseJS, Redux, scikit-learn, NLTK

Experience

Software Engineer in Test Co-Op May 2022 – Dec. 2022
LifeBooster *Vancouver, B.C.*

- Spearheaded the development and maintenance of an end-to-end testing suite with Cypress.io and integration testing suite with Jest, significantly decreasing reliance on manual testing.
- Created infrastructure with Azure to automate code testing in deployment pipelines, reducing deployment time by 2 hours and accelerating the release process.
- Increased test coverage by over 25% through the expansion of the unit testing suite using the Jest library.
- Enhanced internal APIs with OpenAPI Specifications, providing developers with easily accessible and extensible documentation via an internal endpoint.

Software Developer Co-Op Jan. 2021 – Apr. 2021
XGen AI *Vancouver, BC*

- Created a microservice on AWS EC2 Containers to generate AI prediction accuracy data, enabling easy monitoring and optimization of prediction model performance on client websites.
- Developed a REST API to retrieve data from AWS S3 and create performance reports, providing intuitive visualizations of performance metrics and integration with Slack notifications.

Projects

Reinforcement Learning Solver | *Python, NumPy, Jupyter, OpenAI Gymnasium* Jun. 2024

- Employed Q-Learning and Bellman Optimality Equation to train an agent to optimally solve the Cartpole and Mountain Car problems.

Portfolio Website | *JavaScript, React.js, CSS, Framer Motion* Feb. 2024

- Crafted a responsive website using React and the Framer Motion library to effectively showcase my professional background.

HappyHaiku | *Python, Pandas, NLTK, Flask, Docker* Feb. 2024
A bot that uses Natural Language Processing to generate haikus for positive comments on Reddit

- Utilized Python's pandas and NLTK libraries to conduct sentiment analysis and syllable computation.
- Established a web server using Python Flask, facilitating automation and seamless interaction with the bot.
- Dockerized the bot to streamline deployment and ensure environment independent performance.

dogFish | *JS, React.js, Express, MongoDB, Mongoose, Google Maps API, SendGrid* May 2023 – Aug. 2023
A multifaceted web app for connecting casual players and organizing local sports games

- Collaborated in a team to develop a client powered by React, Redux, and Material UI to provide a familiar, minimal, and intuitive user interface that supports matchmaking, communication, and profile customization.
- Leveraged REST APIs built with Express, and MongoDB databases to optimize data transfer and enhance system performance, interfacing with the React client for efficient CRUD operations.
- Integrated the Google Maps API to enable location-based matchmaking, and SendGrid for email authenticated logins.