Jason Deol

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Technical Skills

Programming:	JavaScript (Node.js, React, Svelte, TypeScript), Go, Java, Python, C++, Haskell*
Tools/Environments:	HTML, CSS, Git, VS Code, PostgreSQL, Linux (Ubuntu), Docker, AWS, Jira
Testing:	JUnit, Cucumber * currently acquiring

Personal Projects

Conversin – Chatroom Web App   Mar 2023 – Apr 2023
- Utilized Go channels, and websockets for concurrency and real-time communication between clients.
- Applied observer design pattern for scalable and decoupled client-chatroom interaction.
- Employed error handling and data validation to ensure a seamless user experience.
- Used Svelte and Vite to create a fully responsive website for both desktop and mobile.

Neural Network Web App   Apr 2023 – Jun 2023
- Utilized multilayer perceptron and linear algebra libraries that I implemented from scratch using C++.
- Employed React, TypeScript, HTML, and CSS to create the front end of the web application.
- Built and trained a multilayer perceptron to recognize hand-written digits 0-9, using MNIST data.
- Built web server to handle POST requests from front-end and respond with networks prediction.

Unprocrastinator – Todo List Web App   Feb 2023 - Mar 2023
- Built a fully dynamic and responsive web application using SvelteKit, and TypeScript.
- Employed SvelteKit form actions and MongoDB to hande API requests and manage data on the back-end.
- Implemented user authentication using JWT tokens and cookies for secure logins and route protection.
- Implemented filtering and sorting options for tasks based on completion status.

Work Experience

Lead Software Engineer, Whatifi.io   Sep 2023 – Present
- Led large-scale refactor of tightly coupled clientside code into a robust and scalable API
- Led technical design, development, and implementation of various features for our API and calculation engine
- Coordinated with CEO to provide accurate project tracking, projections, and timelines
- Mentored new developers by helping them become acquainted with the intricacies of the codebase, providing feedback on code reviews, and helping them reason through complex problems

Software Engineer Intern, Elastic Path   Jan 2023 – Sep 2023
- Worked with mainly Go, utilized minimal JavaScript for testing with Cucumber.
- Developed, tested, and helped deploy new features such as split-shipping and cart previews for our orders and promotions back-end microservices.
- Worked with Jira for agile project management, and GitLab for feature deployment.
- Participated in daily standups and sprint planning, and communicated effectively with co-workers.

Full Stack Software Engineer Co-op, Whatifi.io   Sep 2021 – Apr 2022
- Worked with a Node.js, React-Redux, and PostgreSQL stack. Utilized Go for back-end services
- Coded interactive user facing components utilizing React and TypeScript
- Created internal API calls between the front-end, Express web server, PostgreSQL database, and company proprietary back-end Decision Engine
- Developed and implemented novel data structures in company Go based back-end Decision Engine
- Deployed company production software using GitHub Actions, Netlify, AWS Lambda, and AWS ECS/ECR
- Managed company PostgreSQL database by utilizing SQL to create, modify, and query tables.

Academic Projects

Password Manager   Jan 2020 - Apr 2020
- Created a secure personal password manager in Java that stored all user entries client-side.
- Developed a highly user friendly GUI to increase ease of both creating and retrieving entries, while also providing additional security by obscuring sensitive information
- Utilized JSON to both save and load user data onto and from database files
- Utilized high level ciphers such as AES to encrypt and decrypt the applications database file
- Took caution to make use of best security practices to handle passwords and sensitive data in memory
- Made use of software design principles and object orientated programming principles

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Volunteer Experience

Gift Shop Volunteer, Vancouver Coastal Health   May 2016 – Mar 2020
- Communicated with patients in a respectful manner, and provided remarkable customer service
- Assisted with sales, patient item delivery, and various general tasks
- Observed patient confidentiality and all times

Education

Completed - Bachelor of Science, Cognitive Systems Major   Sep 2019 – Dec 2023
University of British Columbia, Vancouver, BC

Completed - Bachelor of Science, Biology Major   Sep 2014 – Apr 2018
University of British Columbia, Vancouver, BC

Interests

Playing video games, weightlifting, rock-climbing, running, general fitness, and automating video games via bots and scripts.