John Man

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EDUCATION

University of British Columbia

Vancouver, B.C

Bachelor of Science in Computer Science

Sept 2022 - Aug 2026

• Relevant Coursework: Computer Systems, Software Engineering, Algorithm Design and Analysis, Computer Hardware and Operating Systems, Computer Networking, Machine Learning and Data Mining, Advanced Relational Databases, Distributed Systems, Randomized Algorithms

PROJECTS

Collaborative Task Manager | React, TypeScript, Node.js, Express, MongoDB, Jest, Cypress, Docker, AWS

- Developed a real-time task management application with React and TypeScript frontend, Node.js and Express backend, and MongoDB for document-based storage.
- Implemented user authentication and role-based access control to manage projects and tasks across multiple teams.
- Integrated unit and end-to-end tests with Jest and Cypress to ensure robust feature delivery.
- Automated builds and deployments with GitHub Actions, Docker, and AWS (ECS, S3, CloudFront) for continuous delivery and scalability.

Fault Tolerant Key Value Store | Go, RPC, Goroutines, Multi-threading, Distributed Systems

- Built replicated database in Go from scratch implementing Raft consensus algorithm from Stanford's ATC 2014 paper
- Increased database throughput by partitioning service into shards to distribute data/workload across replica groups

Parking Pass Sharing App | MongoDB, Express.js, React, Node.js, HTML, CSS

- Developed a MERN stack application to match users without parking passes to users with one, enabling shared costs through the stable matching algorithm.
- Integrated AI-based text recognition to parse parking ticket information from images, enhancing automation and usability.
- Collaborated in a team of four using Agile practices to ensure iterative development and timely delivery of features.

UBC Course/Room Finder | TypeScript, CSS, React

- Employed agile development practices to create a full-stack query engine for searching and aggregating metadata.
- Employed asynchronous promised-based functions to parse JSON and HTML files from inputted zip files using JSZip API and the ParseS Library, ensuring robustness through thorough testing with the mocha framework.
- Designed and utilized RESTful API endpoints to support scalable, modular client-server interactions.

Job Board | JavaScript, Node.js, Express.js, SQL, OracleDB

- Developed a feature-rich job board website allowing users to manipulate tables, including inserting or deleting job postings and applying various column filters for enhanced usability and functionality.
- Scripted SQL queries to initialize and manage different database relations, such as job postings and applications, ensuring smooth operation of the system.
- Utilized Express.js REST APIs for handling POST, PUT, and GET requests to the Oracle database, enabling efficient data exchange, including retrieving company-wise job counts.

EXPERIENCE

Software Developer

Vancouver, B.C

UBC BizChina

Sept 2023 - Feb 2024

- Achieved successful launch of a full stack web communication/task management tool with 50 active users.
- Strengthened user authentication and streamlined database management using Firebase, enhancing security and efficiency.
- Implemented a real-time chat box with ChatEngine and synchronized a task dashboard and calendar, facilitating seamless teamwork collaboration and productivity.

TECHNICAL SKILLS

Languages: Java, C++, C, Python, Assembly, JavaScript, TypeScript, SQL, NoSQL, HTML, CSS, Golang Technologies: Node.js, React, Firebase, Java Swing, Spring Boot, JUnit, NumPy, Pandas, scikit-learn, MATLAB, R, Cypress, Jest, Docker, GitHub Actions, AWS (ECS, ECR, S3), OracleDB, MongoDB, PostgreSQL, Docker Concepts: Networking, RESTful APIs, Test-Driven Development, Continuous Integration/Deployment (CI/CD), Object-Oriented Programming, Data Structures and Algorithms, Code Reviews, SDLC