

EDUCATION

Bachelor of Applied Science - Computer Science

Simon Fraser University

Apr 2020 - Dec 2024

Burnaby, B.C

SKILLS

Programming Languages TypeScript | JavaScript | Python | Java | C | HTML | CSS

Technologies React.js | Express.js | PostgreSQL | GCP | Docker | Redis | MCP | GitHub | GitHub Actions

NOTABLE PROJECTS

NBA Chatbot

Apr 2025 - Present

Full Stack Developer

Burnaby, BC

- Designed and implemented an **AI-powered chatbot** using a **hybrid Retrieval-Augmented Generation (RAG)** architecture and the **Model Context Protocol (MCP)** to answer natural language NBA queries with real-time, database-backed responses.
- Developed an **Express.js TypeScript/Node.js backend** with **PostgreSQL**, enabling **complex SQL retrieval** and aggregation of player, team, and game statistics.
- Built a modern **React frontend with Tailwind CSS**, providing an intuitive user interface for exploring NBA data and visualizations.
- Engineered robust query handling, including accent-insensitive search, semantic matching, and conversational context memory. **Achieving 90% query accuracy**
- Integrated **rate limiting, error handling, and user feedback mechanisms** to ensure reliability and continuous improvement.
- Implemented **end-to-end testing with Playwright** and automated **CI/CD workflows using GitHub Actions**, then **containerized the application with Docker** and orchestrated services using Docker Compose for seamless deployment and code quality assurance.
- Deployed and managed the application on a **Google Cloud Platform (GCP) virtual machine**, utilizing a load balancer for **high availability and scalability**.

NBA Data Pipeline & Database

Jan 2025 - Feb 2025

Data Analyst

Burnaby, BC

- Addressed the challenge that existing NBA data sources **lacked a free database with consistent data**, making it **difficult to perform comprehensive statistical analysis** and build applications **requiring reliable sports data**.
- Design and build a comprehensive NBA database** by aggregating **player statistics, team information, and game data** from multiple sources into a unified, normalized dataset.
- Developed Python scripts** using **Pandas** to extract data from NBA APIs, **implemented data cleaning and transformation pipelines** to handle missing values and inconsistencies, created automated ETL processes for regular data updates, and structured the database with optimized schemas for efficient querying.
- Successfully **compiled 10+ years of NBA data covering 500+ players and 30 teams**, **reduced data retrieval time by 60%** through proper indexing, and created a reliable data foundation that powered the NBA chatbot application with **90% data accuracy**.

Quiz Web App

Jan 2024 - Apr 2024

Full Stack Developer

Burnaby, BC

- Worked with a team to **build a collaborative quiz application** supporting multiple concurrent game sessions with responsive design for both mobile and desktop users
- Engineered a comprehensive quiz management system with full **CRUD** functionality using PostgreSQL, **designing relational database schemas** for quizzes, questions, and user responses while implementing **RESTful APIs** for quiz creation, editing, and data retrieval
- Test-driven development** of all back-end endpoints using JUnit testing. The back-end was deployed on a GCP VM instance.

EXPERIENCE

Canada Computers

Jun 2021 - Feb 2025

Technician/Team Member

Vancouver, BC

- Translated complex technical issues** into clear, **non-technical language for end users** and stakeholders.
- Provided remote and in-person **technical support with patience** and professionalism.
- Proactively **identified user needs** and **provided preventive solutions** to minimize future issues.
- Stayed current with evolving IT trends, security protocols, and industry best practices.**