

Harlan Jazz Ferguson <https://www.linkedin.com/in/harlan-ferguson-09b55010b/>

FULL STACK DEVELOPER

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Relevant Work Experience

Software Engineer, George Brown College, Research & Innovation Dept., Toronto, ON, 01/2024-03/2024

- Led the development of a mobile application for an industry partner, enhancing process efficiency by 30% by consolidating multiple systems into one solution.
- Engineered using a JavaScript-based tech stack: React-Native for mobile development; Node.js, and Express.js for backend services, with SQLite and HTMX for database management and dynamic web applications.
- Translated complex stakeholder requirements into a functional design; built and optimized the solution from the ground up; and successfully demonstrated the application to industry stakeholders.

JavaScript Projects

My-Game: A Sports Social Media Web App (MERN stack, Auth0, Firebase, Socket.io)

Programmed a platform that utilizes Auth0 for secure user authentication, Firebase's CDN for media sharing, and offers comprehensive user profiles, direct/group messaging, and personalized sports stats. Key tasks included implementing CRUD for user posts, configuring Socket.io for live chat, creating a friendship service, and ensuring backend logic for user data privacy/security by utilizing JWT middle ware for express routes and modern database design principles using mongoose for our Mongo database. My-Game highlights my skills in full stack development and project management, from conception to deployment.

Real-Time Chat Application (Mongo, Express.js, React.js, Node.js, Socket.io, Docker)

Developed a chat web application with instant messaging capabilities. Includes secure user account creation with JWT and password salting/hashing. The server tracks different chat rooms and introduces new users on join. Stored in a mongo database using modern design practices to display chat history to the webapp.

Employee Management Web App (MERN stack, Docker)

Created a web app that allows an admin user to perform CRUD operations on employee accounts on the system. Apart from displaying this information about employees, the home page also dynamically populates a chart giving helpful information at a quick glance such as demographics and average employee salaries.

Demos of all my projects can be found on my website.

Achievements

- 2nd place in George Brown College's Design Jam 2024
- Top 18% in IEEEExtreme 2023 international programming competition with over 20,000 participants
- Top 27% in IEEEExtreme 2022 international programming competition with over 14,500 participants
- Competed in Bell GeekFest 2023 / 2022 and ActInSpace International Hackathon 2022

Education

George Brown College, Advanced Diploma: Computer Programming and Analysis, 09/2021-04/2024

- GPA: 3.48 | Dean's Honour Roll
- Co-founder and VP of GBC Computer Science Club

George Brown College, Advanced Diploma: Business Administration, 09/2017-04/2020

- GPA: 3.32 | Dean's Honour Roll