

Gurpreet Multani

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SKILLS

PROGRAMMING

Languages

Javascript • Node.js • Java • CSS3
Typescript • Shell • Python • HTML5
C# • C++

Databases & Servers

MongoDB • Firebase • SQLite

Frameworks & Libraries

React • Express.js • Next.js • Redux
Mongoose • Django • Bootstrap
Material-UI • Pug • EJS • Bulma

TECHNOLOGIES

Git/Github • Heroku • Netlify
VS Code • Netbeans • Webpack
Passport.js • Postman • Mapbox

COURSEWORK

UNDERGRADUATE

- Digital Computation (C++)
- Intro. to (*Human Centered*) Design

TRAINING / COURSES

- CS50: Intro. to Computer Science
- Full-Stack Web Dev. with React
- Data Structures + Algorithms
- Intro. to Git and GitHub
- The Web Development Bootcamp
- The Modern React Bootcamp

INVOLVEMENT

HACK THE NORTH 2021

Integrated a calendar with a chat app to help with scheduling large events.

KURIUSHACKS

Created a web application to raise awareness about indigenous territories.

HACK THE NORTH 2020

Attended workshops, and worked in groups of 4 to create a medical chat app.

CATALYST PROGRAM

Engineered a prototype to test the pH of water, and pitched to business leaders.

EDUCATION

UNIVERSITY OF WATERLOO

1A SYSTEMS DESIGN ENGINEERING
Expected Graduation April 2026

TECHNICAL PROJECTS

YELPCAMP | 🌐 [WEBSITE](#), 📄 [GITHUB](#)

Dynamic web app to add, rate and review campgrounds.

- Built on **MongoDB/Express/Node.js** stack, utilizing **RESTful architecture** with Bootstrap 5 framework for styling
- Implemented **CRUD endpoints** for user comments and campgrounds operations
- Designed server-side user **authorization** and **authentication** middleware for **10** key routes by leveraging **Passport.js** and related submodules
- Prepared app for deployment on **Heroku** by adding **security headers**, support against **MongoDB injection**, using .env files, and connecting with Mongo Atlas

REACT COLORS | 🌐 [WEBSITE](#), 📄 [GITHUB](#)

Web app used to create, test, customize, and store color palettes.

- Built using **React/React-Router/Material-UI**, used **client-side routing** to increase page load times by **30%** and improve the user experience
- Applied **"State as Props"** design pattern to improve rate of debugging code by **25%**
- Refactored code to use React **context API**, **custom hooks**, and **reducers** and utilized **code-splitting** to improve code readability and scalability

GOTOURS | 🌐 [WEBSITE](#), 📄 [GITHUB](#), 📄 [API](#)

Full stack dynamic tour-booking site to view, book, add, and review tours.

- Build using **Node.js/Express/MongoDB/Mongoose**, designed Gotours API from scratch based on RESTful architecture, and utilized Git/Github for version control
- Employed **MVC Architecture** with **fat-models/thin-controllers** methodology to create an API containing endpoints for tours, users, reviews and tour bookings
- Utilized advanced MongoDB features such as **aggregation pipeline** and **indexes** to run advanced queries and to optimize the performance of the database
- Developed **custom error handling middleware** to differentiate between **operational** and **programming errors** and to provide users with live feedback

WHERE AM I | 🌐 [WEBSITE](#), 📄 [GITHUB](#)

Web app to spread awareness about indigenous territories.

- Built on **Python/Django/SQLite** stack, deployed using **Heroku service**
- Implemented **Google Geolocation API** to get user's current location and find nearest indigenous territory
- Integrated **Wikipedia API** to get info about native tribes and display it to users

EXPERIENCE

CART-MANAGER/STOCKER | WALMART

Jan 2021 – Aug 2021 | Kitchener, ON

- **Managed 6 people** in-charge of replenishing carts for customer use and increased cart retrieval efficiency by **40%**
- Implemented **Covid-19 safety measures** to disinfect carts to minimize the surface spread of the Covid-19 virus and reduce the number of cases by **15%**

CUSTOMER SERVICE MANAGER | WHOLESAL CLUB

Nov 2018 – Oct 2019 | Waterloo, ON

- Compiled and printed customer complaints and suggestions, and presented them to the appropriate authorities to improve customer satisfaction levels
- Collected information on agents and other staff performance from customers to make judgment on their performance