

# MUHAMMAD ALI

+1 647-673-0396 | mb2ali@uwaterloo.ca | [GitHub](#) | [LinkedIn](#)

## TECHNICAL SKILLS

**Languages:** JavaScript, TypeScript, Python, HTML5/CSS3, C, C++, Java, SQL

**Frameworks and Libraries:** React, Node.js, Express.js, GraphQL, Gatsby.js, Redux, Tailwind CSS

**Tools:** Git/GitHub, Linux

## EDUCATION

### UNIVERSITY OF WATERLOO

September 2022 — April 2027

- **Program:** Software Engineering Honours (First Year)
- **Current GPA:** 89.54% or 3.9
- Graduated high school with accumulative average of 100% (**full AP course load**)

## RELEVANT WORK EXPERIENCE

### SOFTWARE DEVELOPER

Coova | June 2022 - December 2022

- Prototyped **full-stack** application (with **REST API**) using **agile processes** to create platform for therapists and people with mental disorders using **React, Redux, Express.js**, and **Tailwind CSS**
- Refactored frontend and redesigned **MongoDB** schemas to reduce database size by 25%
- Implemented ongoing **JSON Web Token** user authentication to reduce login time by 50% and improve security
- Translated **Figma UX wireframes** into **React** components to integrate **Google Calendar API** to mark appointments on user Google calendars

## RELEVANT PROJECTS

### STOKEN

- Developed **React** application with **Express.js** backend in **TypeScript** to digitalize certifications (i.e. First Aid, CPR, WHMIS) as **Web3 Tokens**
- Programmed smart contract in **Solidity** and deployed it on Gnosis (**EVM**) **Blockchain** using **RedHat.js**
- Used **Ethers.js** to let users use their own digital wallet to create tokens

### METROPOLITAN SIMPLIREAD

- Chrome Extension that uses **Beautiful Soup**, **Flask**, and **NLP** libraries to parse and summarize web articles
- Leveraged **MongoDB** so users can save article summaries for later use on any device with their Google account
- Designed and built extension popup interface using **JavaScript**, **HTML5**, and **CSS3**

### SIMPLIPAY

- Advanced payroll software developed using **C# (WinForms)** that uses **Excel Interop** to manage employee database and parse Canadian tax tables. Can calculate accurate CPP, EI, and Federal and Provincial Tax deductions based on wage/salary
- Allows user to generate digital pay stubs in the form of an Excel file for each employee for a given pay cycle

### FOODCODE - STSHACKS (2021)

- **Python full-stack (Django)** application that scans barcodes (**OpenCV**) to get harmful ingredients within products
- Developed algorithm to correctly parse and filter **JSON** data returned by *Barcode Lookup API*
- Used **AJAX** and **jQuery** to dynamically update frontend

### GIGHUNTER - HACK THE 6IX (2021)

- Used **Firebase** and **Vanilla JavaScript** to prototype full-stack application to connect musicians with local venues
- Developed **UI/UX** elements to integrate **Google Maps API** to visually search for and show venue locations

## ACHIEVEMENTS AND AWARDS

- Most Innovative Project (STSHacks): FoodCode (2021)
- Recipient of \$80,000 Schulich Leader Scholarship from University of Toronto for Computer Science (2022)
- Recipient of Bronze Academic Governor General Award (2022)
- Recipient of President's Scholarship of Distinction from University of Waterloo (2022)
- Multiple Awards and qualified for internationals in business case competition (DECA) (2019-2021)
- 1<sup>st</sup> Place Stock Transaction Competition