

Maaz Makrod

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SKILLS

Programming: JavaScript (ES6), React, Redux, Django, HTML, CSS (SASS/LESS), Python, Java, C, C++, SQL, GraphQL,

Tools: MongoDB, MySQL, PostgreSQL, Git/GitHub, Browserify, Heroku, Postman, JEST, Cypress, Apollo Server/Client, Figma

EXPERIENCE

Software Engineer Intern

May 2022 - Present

Rocscience Inc. | JavaScript, LAMP, C#, Unity

- Generating **3D models** of excavation sites using the **Three.js library** enabling users to view their sites in varying environments
- Creating **multiclass JavaScript** programs to simplify interactions with **external APIs like MapBox** from **100s to 10s of lines**
- **Led a team of 5** and **won a companywide hackathon** in developing a **HoloLens application using C# and Unity**
- Resolving **3 to 4** bugs weekly on the company website in a **LAMP** environment using **Twig and CRAFT CMS**

Full Stack Developer

Feb. 2022 - Present

University of Toronto Freelancer's Association | MERN, Sockets, Docker

- Collaborating with **UI/UX designers** and a team of 5 to create interactive full-stack web applications **using MERN**
- Building a **code collaboration website** for SWEs to code together in varying programming languages/environments

Software Developer and QA Auditor

May 2021 - Aug. 2021

Canadian Sheep Federation | MERN, Figma

- Developed software for **monitoring and tracing sheep transport nationwide** eliminating the need for handwritten reports
- **Created schemas and performed advanced queries** to improve the speed of the sheep tracing algorithm by **15%**
- **Led a team of 3 interns** in testing the webapp, generating requirement reports, and designing new website components
- Coded **3000+ lines**, solved **30+ bugs**, made **340+ bug reports**, **15+ wireframes**, and closed **200+ test plans**

EDUCATION

University of Toronto | Candidate for BAsC, Computer Engineering

Expected Apr. 2025

- GPA: 3.91/4.00; Awarded UofT Scholar and Rogers Edwards Admission Scholar scholarships
- Certifications: [Django for Everybody Specialization](#), [Python for Everybody Specialization](#), [Python Classes and Inheritance](#), [Full Stack Web Development with React Specialization](#), [Web Design for Everybody: Basics of Web Development and Coding Specialization](#), [Web Applications for Everybody Specialization](#), [C for Everyone Structured Programming](#), [C for Everyone: Programming Fundamentals](#), [Negotiation Skills: Negotiate and Resolve Conflict](#), [Java Programming: Solving Problems with Software](#), [Project Management the Basics for Success](#)

PROJECTS

Blogging Application

Apr. 2022

[See it Live](#) | [Online Code](#) | MERN, Redux, Material UI

- Developed a **full-stack application** that allows users to view, create, edit, like, and comments on blogs posted by other users
- Implemented login by using **bearer token authentication** and used **E2E testing libraries like Jest** to find bugs in the webapp

Mapping Application

Apr. 2022

[Video Demo](#) | C++, Glade, GTK, Open Street Map

- **Led a team of 3** in developing a **multiclass mapping application** using **C++ for data management** and **GTK for UI design**
- Applied **BFS, Dijkstra's, and A*** algorithms to produce a program that finds paths between **100s of locations sub 17 seconds**
- Implemented a **multithreaded solution** to the **traveling salesman** problem ranking in the **top 25% of submissions**

Curiosity Images

Jan. 2022

[See it Live](#) | [Online Code](#) | React, Reactstrap, NASA API

- Created a web application that **fetches and formats 100s of images** taken by the Curiosity Rover using **NASA's API**
- Implemented a **filter feature** that allows the user to **query NASA's API** for images taken on a certain date

Ads Database

Dec. 2021

[Video Demo](#) | [Online Code](#) | Django, MySQL, Python

- Developed a **full-stack application** that allows users to create, edit, and comment on ads posted by other users
- Uses **GitHub OAuth** to simplify account creation and login users, and developed a feature so users can **upload images**

Express Server

Aug. 2021

[Online Code](#) | Express, MongoDB

- Implemented a **REST API server** that uses an express server to allow user communication with a **MongoDB database**
- **Used Facebook OAuth** to support account creation and managed sessions using **bearer token authorization**

React Restaurant Site

Aug. 2021

[Video Demo](#) | [Online Code](#) | React, Reactstrap, Redux

- Constructed a **frontend React application** that mimics a restaurant website and uses **Redux to manage the state**
- Used a **JSON-server** to simulate fetching and sending data to a server using **asynchronous JavaScript**

Bootstrap Restaurant Site

July. 2021

[Video Demo](#) | [Online Demo](#) | HTML, CSS, JS, jQuery

- Built a mock restaurant website using **Bootstrap4** features like navbar, modals, forms, and the grid system
- **Used NPM scripts** to **build the site** so that it is ready for deployment and ran the site on a **lite server**

Portfolio Website

July. 2021

[See it Live](#) | [Online Code](#) | React, React Bootstrap, AOS, Figma

- **Designed and created** a portfolio website that displays my projects and experiences in an engaging format for others to see
- Deployed online via **GitHub pages** and uses a custom domain from namecheap.com

Python Discord Bot

July 2021

[Video Demo](#) | [Online Code](#) | Python, Discord API, Replit, BeautifulSoup4

- **Web Scrapes** data from Volcano Discovery to display information on earthquakes that have occurred around the world
- Additionally designed and created a website to mock-market the application for potential investors

Resume Registry Database

June 2021

[Video Demo](#) | [Online Code](#) | PHP, MySQL, HTML, Bootstrap, JS

- Built a webapp that allows users to enter information about their **education and employment history** made using **PHP**
- Dynamically **updates the DOM** using information entered by previous users to make things like selecting schools easier

Car Registry Database

June 2021

[Video Demo](#) | [Online Code](#) | PHP, MySQL, HTML, Bootstrap

- Built a **CRUD** application made using **PHP** that allows users to enter, edit, and delete information about their vehicle
- Utilizes a **MySQL** database, and **Bootstrap** for UI and prevents HTML and PHP injection by users

Forest Life Simulation GUI

Jan. 2020

[Video Demo](#) | [Online Code](#) | Java

- Created a multiclass GUI forest life simulation game **OOP, abstract classes, interfaces, and inheritance**
- Improved efficiency by consulting teammates and compacting the program to reduce the number of objects in the stack

HOBBIES AND INTERESTS

- Played soccer and ice hockey on competitive levels and have always loved trying out new sports
- I like to read in my spare time, one of my favorite books is Behind Closed Doors by B.A. Paris
- I also regularly go to the gym and take on various side projects to further my skills