Prajval Malhotra

📞 +1(226)-507-1739 | ✉ p6malhot@uWaterloo.ca | ⭘ prajval-malhotra | in prajval-malhotra-a028891b2

Education

University of Waterloo *Waterloo, Ontario*

Bachelor of Computer Science, Digital Hardware Specialization *Sseptember 2020 - May 2024*

- **Relevant Coursework -** *- Functional programming, Algorithm Design and Data Abstraction, Linear Algebra, Calculus I II, OOP, Testing, Bash Scripting*

Skills

Languages	Python, C, Racket, HTML5, CSS3, Javascript
Frameworks	React, React Native, Tensorflow, Node.js

Experience

Trinity Group *Remote*

Software Engineering Intern *May 2021 - June 2021*

- Worked with the entire project team to balance creative objectives with business needs and technical requirements.
- Worked with frameworks such as React Native, React.js, Node.js, Express.js, and MongoDB
- Created entire frontend of app with React Native, 500+ users on a daily basis. Made minor changes to previous designs.
- Worked on backend with Node.js, Express.js. Wrote Unit and Integration tests using Jest.

Coding tuitions *Kolkata*

Tutor *March - July 2020*

- Taught basic C++ syntax, OOP principles to high school students
- Helped clear and streamline concepts for computer science exams.

Projects

Covid Aggregator ⭘ *TOHacks*

React Native, Node.js, MongoDB *June 2021*

- An app to provide a user with information about available vaccines centres near them, people willing to donate useful resources
- Created REST API with Node.js, Express.js and used MongoDB for the Database. Shows data from vaccine centres across the country
- Used React Native to create the frontend. Deployed API to Heroku
- Originally created frontend in a group setting of 3 people for TOHacks, personally pursued the project to make a it a fullstack app.

TodoTDD ⭘

Javascript, Test Driven Development *August 2021*

- Used a Test Driven approach to develop a REST API for a Todo app with Node.js and Express.js
- Created Unit tests and integration tests with Jest, wrote tests for error handling
- Created mock Mongoose models in Node.js with Jest

MNIST gesture recognizer ⭘

Tensorflow *July 2021*

- Used Tensorflow to create a gesture recoginzer trained on the MNIST dataset
- Increased accuracy by using CNNs to upto 98%, measured accuracy of model with testing dataset
- Used trial and error to determine the best ratio of trial vs test data

Nice Chat App ⭘ ⚲

React.js, Firebase *July 2021*

- Real time chat app, Firebase for Google authorisation, realtime database and backend, React.js for the frontend.

Live User Counter ⭘

Dart, Firebase *August 2021*

- Component which keeps track of when a user opens/exits an app to keep track of the total number of users currently online

Bots ⭘ ⭘ *EngHacks*

Python *June, 2021*

- UWFlow Bot - A reddit bot that replies to mentions of a UWaterloo course on the UW subreddit and replies with course infromation
- SpotBot - Utilized OAuth2 with Flask to get a users playlist and display it on the discord chat when a particular command is entered.