

Divjot Bhogal

Email : divjotbhogal@gmail.com

Mobile : 647-861-9071

Github: github.com/AltraDiv

EDUCATION

- **University of Waterloo** Waterloo, Ontario
Bachelors in Computational Mathematics Sept 2020 – Dec 2025

EXPERIENCE

- **CrackInterview** Remote
Backend Developer July 2024 - September 2024
 - Researched, documented, and implemented a chatbot using DialoGPT libraries and PyTorch, training it with PDF questionnaires, and deploying with Flask; led backend maintenance and AI integration.
 - Used Vite+JS to integrate front-end components to backend Python servers
 - Engineered a real-time, one-on-one chat system utilizing WebSockets and asyncio for chatting communication.
 - Implemented video meeteeing rooms using WebRTC, SocketIO, PeerJS and TURN servers
- **Credit Valley Hospital; Trillium Health Partners** Mississauga, Ontario
Software Developer, Business Intelligence Aug 2019 - Feb 2020
 - Developed custom websites and reports for physicians and staff, streamlining work and reducing waittimes.
 - Spearheaded the "Priority Tracking Tool" project, which was adopted across Trillium Health Partners in the Greater Toronto Area, significantly enhancing wait times for over 1.75 million patients annually.
 - Utilized HTML, CSS, and JavaScript for front-end development, SQL for database management, and C# for back-end implementations.
 - Used MSSQL to implement data interaction with tool by creating scripts, tables, queries, etc and connecting it with frontend.
- **Replic** Waterloo, Ontario
Junior Full Stack Developer July 2021 - May 2022
 - Developed a startup website using Microsoft Visual Studio with MVC and ASP.NET, following JIRA tasks to implement controller logic and functionality.
 - Implemented MSSQL for database management, C# for backend development, CsHtml for frontend views, and AWS RDS for deployment.
- **Waterloo Rocketry Club** Waterloo, Ontario
Propulsion Engineer June 2023 - Pres.
 - Co-led projects to help build University of Waterloo's first liquid engine rocket using NOS and Ethanol
 - Used Solid Works to make CAD drawings; machined liners, nozzles, ablative test stands, and project plannings

PROJECTS

- **Nasa Agriculture Data Tool (AgriTech)**
 - Developed for Nasa's Space Challenge for a chance to visit Nasa's HQ. Use's 2 Nasa satelites data to predict groundwater, precipitation and land temperature to help farmers in agriculture using Pytorch.nn, flask, etc
- **Compiler**
 - Currently in progress: Building a compiler in C#, with ongoing updates available on GitHub.
- **Medical Emergency Caller VitalSense**
 - Developed an emergency caller system using Twilio API for calling, Gemini API for AI, and React+Vite+ExpressJS & Arduino for BPM measurement.
- **Impaired Driving Detector SteadyWheel**
 - Designed at Hawkhacks 2024, this project detects impaired driving using Twilio, Gemini API, and a stack of React+Vite+Flask+MongoDB.

PROGRAMMING SKILLS

- **Languages:** Assembly, C#, C++, C, SQL, Html, Java, CSS, JS, R, Python, Swift, (Learning GO)
- **Technologies:** AWS, GIT, React, ASP.NET, Google Cloud, Node.JS, Vite