GURMAN BRAR

Candidate for BASc in Biomedical Engineering

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EXPERIENCE

Full Stack Software Developer
DNAstack

📅 May 2022 – Sep 2022   📍 Toronto, Ontario

- Planned and contributed to the improvement of data quality and quantity via the development of an ETL pipeline.
- Produced complex SQL queries to extract and transform large sets of data in order to increase data quality and meaning for end users.
- Worked in a fast-paced startup environment on a small team (3 members), closely collaborating with other engineers to plan solutions to various data extraction and transformation problems.
- Configured and deployed various SaaS architecture to Kubernetes clusters locally and in production.

Software Engineer
Ford - Autonomous Vehicles

📅 Sep 2021 – Dec 2021   📍 Toronto, Ontario

- Worked on planning and implementing test-driven production TaaS software solutions for large consumer groups with customer experience and software efficiency in mind.
- Developed a single-page React application over the course of 4 months. Planned and documented potential use cases of micro-frontends within the application using single-spa and module federation (Webpack 5).
- Explored and implemented ways to reduce page load times such as server-side rendering.
- Contributed to the development and improvement of a CI/CD pipeline (Harness) for Google Cloud Platform.
- Co-organized and participated in a "Ford Pro Hackathon". Developed an accessibility package to win second place.
- Presented a React test-driven development tutorial to a group of 40+ software engineers.

Full Stack Developer
Altis Labs

📅 Jan 2021 – Apr 2021   📍 Toronto, Ontario

- Planned and created dockerized containers for the efficient and effective deployment of API and web services for developers and users.
- Planned, created, and improved API features in Node.JS using GraphQL to query a PostgreSQL database.
- Assisted in the development of a stand-alone React app that provided a flexible, efficient user interface with features such as graphs, tables, and data conversion algorithms. (Redux, Axios, Node).
- Created scripts that simplified, organized, and decreased the time required to perform repetitive actions with databases and medical imaging communication services (PACS, DICOM).

Full Stack Software Developer
Veer AI

📅 June 2020 – Sep 2020   📍 Toronto, Ontario

- Contributed to planning, building, configuring and deploying major pieces of a SaaS product architecture, including APIs and internal authentication mechanisms.
- Research and contribute to the choice of tools in the development stack in different parts of the architecture.
- Developed a standalone flexible single-page design user interface using React JS and ES6 JS (React Router, Axios, React Hooks, etc.).
- Hands-on with Django-based backend API layer, including Django Rest Framework and JWT authentication.
- Learned the fundamentals of working with relational databases (PostgreSQL).
- Developed communication skills collaborating in a start-up environment. Actively participated in stand-ups summarizing and simplifying technical work done on the product.

HONORS & AWARDS

- Winner of NASA Space Apps 2021 Waterloo
- Valedictorian of Graduating Class (High school)
- Ontario Scholars Award.
- President's Award Scholarship (95%).
- Nominated for Schulich Leader Scholarship.

SKILLS

Python, C++, React, JavaScript Django, Redux, GCP, Node, SQL   ●●●●● ●●●●●

EDUCATION / COURSES

Data Structures & Algorithms (C++)

University of Waterloo

📅 Jan 2020 – Apr 2020

Intro To Pattern Recognition

University of Waterloo

📅 Jan 2022 - Present

PROJECTS

CardioVizion

- Co-founded a startup that aims to develop wearable technology for remote cardiac monitoring and prediction. Working to partner with medical schools and biotechnology organizations in Canada.
- Built a stand-alone React app with authentication and storage services via a Django API layer.
- Currently developing a wearable Ai-based wristband that can diagnose users with various cardiovascular conditions.
- CardioVizion.com

Cryptocurrency Trading Bot (Web 3.0)

- Automatically discovers and purchases the newest deployed smart contracts on the Binance smart chain network by connecting to a user's Metamask wallet.
- Backend is developed in Express (NodeJs with Ethers and Web3), while the frontend is developed in. React.

SpaceBook - Moon Mission Dashboard

- Project won the 2021 NASA Space Apps hackathon in Waterloo.
- Organized, planned, and implemented a React dashboard that utilizes an express backend to provide users updated console log data from moon space missions.
- Users can view console logs based on missions and like/comment on various console logs.
- Astronauts are able to upload console logs with attachments (audio, video, files, etc.) via the dashboard and respond to comments.

VisComp - ML X-ray Classifier

- Developed a backend in Django to serve the machine learning model via API endpoints and manage database operations. The backend also handles user management and record keeping.
- Frontend was developed in React and allows users (medical professionals) to save their results under a user account and access previous records through the dashboard service.
- Developed to reduce the error margin with emergency room diagnosis of upper respiratory illness. Providing a 90can be quickly and accurately diagnosed.