

# Muhammad Hassan Tariq

✉ mhtariq3@gmail.com ☎ 587-703-5108 🌐 GitHub 🌐 Website in LinkedIn

## EDUCATION

### Bachelor of Science in Software Engineering

University of Calgary

08/2018 – 04/2023

Calgary, Canada

**Clubs:** Developer Student Club, Competitive Programming, Engineering Leadership

**Significant Coursework:** Scalable Data Analytics, Data Science, Computer Graphics, Software Architecture, Computer Networks, Database Management Systems, Embedded Systems, Principles of Software Design, Operating Systems

## PROFESSIONAL EXPERIENCE

### Software Engineer Intern

General Motors

01/2022 – 08/2022

- Participated in architecture, design and implementation of back-end features and bugfixes mostly using C# and sometimes React as part of the **Map Data Tools Team**.
- Obtained high exposure to agile methodologies and software development best practices.
- Successfully implemented a critical bugfix that was blocking the key production pipeline.

### Software Engineer Intern

TELUS

01/2021 – 12/2021

- Worked on various machine learning, data science, and data engineering projects as part of the **Advanced Analytics and AI Enablement Team**.
- Developed a machine learning classification model for predicting pet ownership using various algorithms, and presented findings to peers. Helped productionize the model on GCP.
- Improved usability of an automation script for geofencing through documentation and code enhancements, and migrated the script to GCP.
- Conducted comprehensive data analysis on a network improvement churn reduction project, leveraging 5G data to identify target customers and successfully deliver a campaign.
- Prototyped an LSTM deep learning model for predicting network experience perception, and presented findings to a group of over 100 people including executives. Model was scheduled to be put into production shortly after internship ended.
- Utilized Google Cloud Platform, Python, and SQL in this role.

## SKILLS

### Back-end Development

C#, Java, Python, C++/C

### Python for DS/AI

sklearn, pandas, numpy, sklearn, spark

### Cloud and Database

Google Cloud Platform, BigQuery, BQML, SQL

### Front-end Development

Javascript, HTML, CSS, React, Node, Express

## PROJECTS

### EduConnect

02/2021

- Developed a multi-functional full-stack web app for students using **HTML/CSS** for the front-end and **JavaScript/Node/Express** for the back-end. Users account data and course schedule information is stored in a **MongoDB/Mongoose** Database.
- The complimentary discord bot is created using **JavaScript/Discord.js** and I leveraged the **Google Cloud** DialogFlow API to create an integrated AI chat bot.

### Student Course Registration App

04/2020

- Developed a full-stack **Java** application using the spring framework and SQL database
- Explored many practical concepts including object-oriented design and development, client-server architecture, multithreading, JDBC, GUI, Java MVC and Git version control.

### Sage Medical Clinic Appointment Booking App

12/2020

- Developed a full-stack app using **HTML/CSS** for the front-end and **JavaScript/Node** for the back-end. Users account data and appointment information is stored in a local MS SQL Server.