# JAINISH MEHTA

im3mehta@uwaterloo.ca | № 519-781-4847 | in linkedin.com/in/jainishmehta/ | 🗘 github.com/jainishmehta | 🕮 jainishmehta.github.io



Python 0 C/C++

Javascript

AWS MATLAB SOL o Java 0

Git Linux Selenium 0 **Data Science** ReactJS

Docker

**EDUCATION** 

University of Waterloo

Mechatronics Engineering Option: Artificial Intelligence (AI)

Sept. 2018 - Apr. 2023



#### Coinbase – Data Scientist

May 2022 - Present

## 🥯 NVIDIA – Backend Software Engineer, Intelligent Video Analytics Team

Jan. 2022 - Apr. 2022

Python, C++, Bazel

- Refactored GXF codebase to ensure extensions were alongside Python bindings to ease build of files. Simplified import statements.
- Developed 4 new major features involving transferring data between tensors, creating new APIs, and creating new python bindings to expose scheduling terms so developers can manipulate them from the original .yaml graph files.

## Teradata Corp. – Data Scientist

May 2021 - Aug. 2021

Python, Selenium, SQL

- Built a polynomial regression machine learning model to determine future client CPU utilization. Extracted 400 000+ CPU utilization data points using SQL and cleaned data and implemented model using pandas, skicit-learn, numpy, pylab, and scipy.
- Queried and visualized over 15 client portlet usages over time using Python, SQL, and Matplotlib.

### Red Canari Inc. – Full Stack Software Developer (Cybersecurity)

Sep. 2020 - Dec. 2020

ReactJS, Python, AWS, RESTful API, Azure

- Developed serverless web app & Chrome ext. to avoid user spam mails by creating 300+ email proxies. Implemented using HTML, CSS & ReactJS.
- Employed AWS Amplify, AWS Lambda, and AWS Cognito to create RESTful API backend services and AWS CodePipeline to set up CI/CD pipelines.
- Spearheaded integration of a Traefik reverse proxy with a Flask authentication server. Validated JSON Web Tokens from Azure AD.

#### Manulife Financial – DevOps/Quality Services Software Developer

Jan. 2020 - Apr. 2020

Java, Junit, Jenkins, Perfecto, Selenium, Postman, Grafana

- Reduced product release time by 10% by overhauling 4 new health checks for Manulife's ALM and DevTest environments in Java.
- Applied Postman and SQL to parse and guery Perfecto statistics to monitor product health and usage. Visualized results on Grafana.

## 🎇 Mission Control Space Services – Robotics/Backend Developer

May 2019 - Aug. 2019

C++, Typescript, Embedded Software

- Programmed various algorithms in C++, including cubic spline interpolation, XML parsing for terrain classification, and subscribing ROS nodes to LiDAR.
- Aggregated IMU and camera sensor data to determine tilt of rover on terrain, creating a novel calibration routine.

#### **Waterloop Embedded Software Team**

Jan. 2019 - Present

- Modelled an Arduino program to interpret signals for a rotary encoder using C, improving rotation accuracy by 5%.
- Co-led the generation and interpretation of message outputs from a RobotEq motor controller.

## SIDE PROJECTS

#### **Object Length Identifier**

Apr. 2020

• Implemented OpenCV in Python to measure the length of an object when measured against a reference object. Developed contours to identify and output object length. Output has accuracy of 95%.

#### Thrifter: Machine Learning to Find an Optimal Match Between Two Images

Feb. 2019

- Collaborated with a team of 4 to engineer a web app using HTML, CSS, and Express.js (jQuery for API requests) that incentivizes users to thrift shop.
- Utilized Google Cloud Platform Vision API for computer vision functionality, a MongoDB database, and K-nearest neighours algorithm to generate an optimal match between images with 85% accuracy.