

MIHIR GUPTA

Phone:

Email:

LinkedIn:

GitHub:

Website:

Education

University of Waterloo

Waterloo, ON

Candidate for B.A.Sc., Computer Engineering

September 2021 — April 2026

- ❖ Dean's Honours List for Spring 2022 Term | Spring 2022 ECE Academic Representative

Technical Skills

Languages: Python, Java, Kotlin, Dart, C++, C, Javascript, XML, HTML/CSS, VHDL

Frameworks | Libraries: ReactJS, NextJS, NodeJS, Flutter, Android SDK, Tensorflow, Flask, Springboot, PyQt5, Java Swing

Development Tools: Git, Unix, Bash, Postman, Android Studio, Figma, Vim, Github, Azure DevOps, Confluence

Work Experience

Royal Bank of Canada | Software Developer Intern

Toronto, ON (Sept 2022 – Present)

- ❖ Presently writing an Android Library in Kotlin encompassing vital banking services and secure REST API network calls
- ❖ Prototyping a Wear OS Android banking app with Kotlin and the Jetpack Compose toolkit for UI; integrating banking features into the application using MVVM architecture

Royal Bank of Canada | Android Developer Intern

Toronto, ON (Jan 2022 – April 2022)

- ❖ Researched implementing in-app features into Google Assistant with Android widgets by undertaking a proof-of-concept (PoC)
- ❖ Architected several widget prototypes with Java and XML layouts to recreate services for the app and integrated the prototypes into Google Assistant
- ❖ Implemented fingerprint authentication into prototypes by using the Android native Biometric API; made secure REST API network calls to enable services in the widgets
- ❖ Presented the PoC results to the Head of Android Development and received positive feedback on prototypes

Microsys Inc. | Software Engineer Intern

Markham, ON (July 2021 – Aug 2021)

- ❖ Developed a mobile app UX/UI using the Flutter framework and Dart development language on Android Studio to implement a smartphone version of web-based software solution and tested mobile app using the Android Emulator
- ❖ Tested REST API requests with Postman using JSON data-interchange format; programmed tested REST API calls in the mobile app to develop and code the core functionalities
- ❖ Communicated progress to senior developers and used Azure DevOps + Git version control to collaborate on development with other team members; participated in code reviews with senior developers and incorporated enhancement ideas

Volunteer Experience

Waterloo Aerial Robotics Group | Computer Vision Project Manager

Waterloo, ON (Jan 2022 – Present)

- ❖ Overseeing the development of a UAV ground station desktop application built with PyQt5 and designed UX/UI with Figma
- ❖ Built and trained a convolutional neural network using Python, the Tensorflow platform, and Keras API to classify images in the CIFAR-10 dataset

WAT.ai | Artificial Intelligence Researcher

Waterloo, ON (Sept 2022 – Present)

- ❖ Collaborating with Open Climate Fix (a non-profit product lab focused on reducing greenhouse gas emissions with a machine learning approach) to develop and deploy a machine learning model with PyTorch and Google Cloud Platform to predict the photovoltaic output of solar farms in Italy

Projects

RBC Battlesnake Competition | Python, Flask, Battlesnake API

- ❖ Took 1st place in the rookie division competing against 12 other teams; the link to the competition recording can be found [here](#)
- ❖ Worked in a team to build and deploy a web server using Python and the Flask framework to compete in the RBC Winter 2022 Battlesnake Competition
- ❖ Requested and sent information to the Battlesnake API; programmed algorithms to determine the optimal move for every turn in the match