MIHIR GUPTA

Phone Number: (647) 331 - 9757   **Email:** msgupta@uwaterloo.ca   **LinkedIn:** Mihir Gupta   **GitHub:** @mgupta27

Technical Skills

Programming Languages: Java, Dart, C, Turing

Tools/Libraries: Flutter, Postman, Android Studio, VS Code, Eclipse, Java Swing, Java AWT, Git, Azure DevOps, MS Office

Work Experience

Software Engineer Intern, Microsys Inc.   **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

Leadership Experience

FIRST Robotics Competition (FRC) Team Mentor, Team 4252   **Markham, ON (Sept 2017 – June 2021)**

- ❖ Managed a high school FIRST robotics team for the 2020-21 school year and taught programming, hardware, and engineering principles to educate new members
- ❖ Worked with team members to design a robot and program it in Java with VS Code to participate in the FIRST Robotics competitions events at Ryerson University and York University
- ❖ Organized team members to create a product proposal, elevator pitch, and technical presentation for the FIRST Innovation Challenge in two months

Lead Executive, Software Club   **Markham, ON (Sept 2020 – June 2021)**

- ❖ Presented programming tutorials on Scratch, HTML, Photopea, C, and Scala programming languages/tools to help members build their software skills and enhance their knowledge
- ❖ Held weekly meetings for my high school's software club and met with the executive group to create weekly lesson plans

Warrant Officer Second Class, 351 Silver Star Royal Canadian Air Cadets (RCAC)   **Markham, ON (Sept 2016 – June 2021)**

- ❖ Appointed as the Flight Commander of Flight 3 and was responsible for leading a group of 30 cadets; team captain of squadron's Marksmanship team and coached members to the provincial competition
- ❖ Completed RCAC administrative work and delivered weekly lessons to teach cadets about aviation, aerospace, and drill

Projects

Sorting Algorithm Duration, Java Swing Application/Multithreading

- ❖ Programmed a Java Swing application to test which sorting algorithm (Bubble Sort, Insertion Sort, Partition Sort, and Selection Sort) is the most efficient in sorting a randomized set of integer elements in an array
- ❖ Developed this application using the Eclipse IDE and created the GUI with the Java Swing Library and Event Listeners
- ❖ Utilized Multithreading and Object-Oriented Programming to run the sorting algorithms concurrently

The Mechemtron, FRC Innovation Challenge Design Proposal

- ❖ Directed and collaborated with robotics team members to create the Mechemtron design proposal, a pedal powered generator used for exercising and generating renewable energy
- ❖ Presented the proposal to the FIRST Innovation Challenge judges and explained technical details about the product
- ❖ Designed technical plans for the product, held follow up meetings to discuss progress, and troubleshoot issues

Awards

Principal's List (Grades 12 and 11) | Highest Academic Achievement Award in Math, Computer Science, and Physics
Royal Canadian Legion Cadet Medal of Excellence | 3rd Place Zone 14 Marksmanship Championship Junior Individual

Education

University of Waterloo   **Waterloo, ON**

Candidate for B.A.Sc., Computer Engineering   September 2021 — April 2026