

# Hematullah Karimzada

 Hematullah-Karimzada |  HemaKarim |  Website |  hematullahkarimzada7@gmail.com |  (647) 262-5926 | Toronto, ON, Canada

## EDUCATION

**Georgia Institute of Technology**  
*Master of Science (MS): Computer Science*

2024 - Expected 2026

**Ryerson University**  
*Bachelor of Engineering (BEng): Mechanical Engineering Mechatronics Stream*  
Relevant Courses: Mechatronics/Mechanical Design, Digital Computation & Programming, Real-Time Computer Control System, Digital Systems, Microprocessor Systems, Fundamentals of Robotics, Engineering Graphical Drawings.

2018 - 2023

## WORK EXPERIENCE

**Software Engineer**  
*360 Engineering & Environmental Consulting Ltd.*

November 2023 - Current

- Utilized **React** to design and implement a user-friendly interface within Microsoft Teams for the company, streamlining the collection of well-site location data and licenses, and improving productivity by **20%**.
- Integrated with public databases using **PostgreSQL** to automate data retrieval and storage, ensuring secure handling of sensitive information and compliance with data protection regulations.
- Leveraged **R** programming language for predictive analytics, implementing **Machine Learning** models to generate accurate predictions exported to **Excel** or CSV files, and improving efficiency by **100%**.

**Reliability, Maintainability and Safety Engineering Intern**  
*Bombardier Inc.*

August 2021 - August 2022

- Collaborated with diverse cross-functional teams to successfully execute numerous projects, including **Safety Assessments**, Optimization initiatives, and Failure Mode and Effects Analyses (**FMEAs**).
- Delivered informative presentations and conducted training sessions for colleagues and superiors, equipping them with foundational knowledge in tech domains such as Artificial Intelligence (**AI**), **Machine Learning**, and **Deep Learning**.
- Developed an **Excel** script that optimized calculations for **Safety Requirements** and **Airworthiness failure conditions** on aircraft, reducing data entry and calculation time by an impressive **300%**.

**Web Developer/Unity Developer**  
*TechZenik*

January 2021 - August 2021

- Developed a **Unity** WebGL game and seamlessly integrated it into the **Angular front-end** using **C#**, resulting in a **40%** increase in product subscribers..
- Collaborated with **back-end** developers to integrate **RESTful APIs** and optimize application performance,while concurrently developing **ASP.NET Core** Web **API** endpoints, which resulted in a **250%** boost in player retention.

## SKILLS

Mechanical	DFA/DFM, GD&T, Safety Assessments, FMEAs, Root Cause Analysis.
CAD/Software	AutoCAD, SolidWorks, MATLAB, Simulink, NI LabVIEW, and MS Office.
Languages	Python, C, C#, C++, HTML5/CSS3, JavaScript, Assembly, VHDL, R, SQL, NoSQL.
Frameworks	Angular, React, Vue, Express, Flask, Django, ASP.NET Core
Tools	MYSQL, MongoDB, PostgreSQL, Linux, Git, GitHub, NumPy, Pandas.

## PROJECTS

**Self Cleaning Eye Glasses Case**

January 2023 - April 2023

- Designed 3D printed case with piezoelectric transducers for cavitation-based cleaning.
- Programmed Arduino microcontroller in Assembly language for energy-efficient operation.

**Self Balancing Pendulum**

September 2022 - December 2022

- Implemented dynamic system with Arduino UNO board and PID controls.
- Synchronized movement of AWD moving cart with pendulum’s resistance for precise coordination.