Shubho Mukherjee

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RELEVANT EXPERIENCE

Toronto Metropolitan University – Metropolitan Aerospace & Combustion Hub *Junior Developer*

March. 2023 – Present *Toronto, ON*

- Innovated real-time control and monitoring of a liquid rocket engine by creating an efficient GUI using Python and PyQT framework.
- Streamlined engine valve testing, reducing testing time by 30% through intuitive data visualization and control processes.
- Designed custom widgets and shaped front-end improvements, enhancing user interaction and experience.
- Shaped the front-end design and user experience improvements, resulting in a more intuitive and user-friendly interface.

Toronto Metropolitan University – Metropolitan Aerospace & Combustion Hub Business Development

March. 2023 – Present *Toronto, ON*

- Managed sponsorship data with precision, maintaining logs, and resources while utilizing Excel to enhance efficiency.
- Successfully negotiated sponsorship agreements with faculties, student organizations, and corporations, showcasing effective communication and negotiation skills.

Danforth CTI - Rocketry Club

Vice President & Co-founder

Nov. 2021 – May. 2022

Toronto, ON

- Founded and led a rocketry club, fostering a collaborative and supportive environment of **100+** students, promoting knowledge sharing, creativity, and camaraderie among team members.
- Facilitated seamless communication between sub-teams and meticulously coordinated work schedules for each section of the rocket, ensuring effective collaboration and execution of projects.

PROJECTS

Stop Sign Detection | Python, NumPy, OpenCV

March. 2023

- Developed a precise stop sign detection model using a sliding window approach and mean square error for similarity comparison.
- Implemented image pyramids for optimized stop sign detection at different scales, ensuring real-time processing and improved performance.

<u>Collab – Whiteboard Website</u> | HTML, JavaScript, Node.js, Express.js, Socket.io

July. 2023

- Developed a real-time collaborative whiteboard website, promoting seamless collaboration, while using less resources than other applications.
- Demonstrated strong UI/UX design skills with an emphasis on user-friendliness and essential functionality.

EDUCATION

Toronto Metropolitan University

May. 2026

B.Sc., Computer Science

Toronto, ON

- 3.87 GPA, Dean's Honors List 2023
- Relevant Coursework: Python OOP, Java OOP, C and Unix, Data Structures, Linear Algebra

SKILLS AND AWARDS

Languages: Python, Java, HTML5, CSS, JavaScript, SQL

Technical: Node.js, Express.js, Socket.io, Git

Tools: Excel (Pivot Tables, VLOOKUP), Tableau, Microsoft Office, GitHub, Trello