MISHRAN HAQUE

Brampton, ON (Willing to relocate) | mishran.haque@gmail.com | LinkedIn

EDUCATION

B.Eng. Aerospace Engineering, Minor in Computer Science **Sep 2018 – Exp. May 2023**
Toronto Metropolitan University (Formerly Ryerson University) *Toronto, ON*

- Relevant course work: Aerodynamics, Aerospace Structural Design, Avionics and Aircraft Systems, Thermodynamics, Fluid Mechanics, Digital Computation and Programming, Stress Analysis, Control Systems

SKILLS

Engineering Tools and Software
- CATIA V5
- SOLIDWORKS
- ANSYS (FEA and CFD)
- Arduino

Programming
- Python
- Java
- C/C++
- HTML/CSS
- MATLAB
- UNIX
- JavaScript
- Git

Other
- Microsoft Excel
- Microsoft Project
- Microsoft PowerPoint

RELEVANT EXPERIENCE

Project Management Intern | Canadian Space Agency (CSA) Jan 2022 – Apr 2022 | Sep 2022 - Present
Longueuil, QC

- Led weekly team meetings as a project manager, to keep members up to date with the project and provide additional support to CSA engineers
- Collaborated with contractors, to communicate concerns regarding project schedule, risks, and requirements to ensure that the project management process is on par with the required Agency standards
- Contributed to key tasks throughout the early phases of the project including project scheduling, procurement processes, project evaluation, and various deliverable documents
- Created and submitted monthly project dashboards based on new changes and updates to provide an overview of the overall project health

Mechanical Engineering Intern | Canadian Space Agency (CSA) May 2022 – Aug 2022
Longueuil, QC

- Developed a deformable wheel design using CATIA, for CSA's Rover Mission of the Lunar Exploration Accelerator Program (LEAP)
- Researched materials and strategies to improve upon each iteration of the developed wheel prototype and implemented appropriate changes
- Conceptualized a modular rover design with a supervisor to obtain a design patent for the development of a future rover project
- Collaborated with team members, private contractors, and NASA during technical meetings throughout the work term to understand the development of the technical aspects of a planetary exploration rover

Design Specialist | Ryerson Propulsion Group Jun 2021 – Jan 2022
Toronto Metropolitan University, Toronto, ON

- Computed combustion and fluid flow simulations based on preliminary designs to help the team optimize the final engine design
- Researched various simulation methods and models for combustion simulations of the engine's combustion chamber
- Updated and educated team members on various simulation processes and shared progress during weekly meetings
- Lead CFD Simulations for the Combustion Dynamics sub-team

Avionics Sub-team Member | Ryerson Rocketry Club Sep 2019 – Jan 2022
Toronto Metropolitan University, Toronto, ON

- Performed thermodynamic calculations and implemented thermal management strategies for the rocket's avionics bay to ensure that the electronics remain within suitable temperatures at altitudes of up to 30,000 feet
- Designed a portable ground station, to collect and display transmitted data from the rocket; researched and implemented suitable electronics such as Raspberry Pi, Display, Power Source, and Controllers
- Assisted in implementing a graphical user interface (using Python) into the ground station to display rocket data in real-time
- Collaborated with team members to prepare and present the rocket design to Spaceport America judges

Vice President Education | Ryerson Aerospace Course Union May 2020 – May 2021
Toronto Metropolitan University, Toronto, ON

- Scheduled, planned, and hosted multiple academic events, including information sessions, tutorials, exam preps, and workshops
- Advocated on behalf of students and directed them to academic resources when appropriate
- Resolved student inquiries through social media, emails, or direct messages
- Cooperated with team members weekly to discuss ideas and implement strategies to help enhance the university experience for students in the program