Farasha Rahman Meem

1328 Birchmount Road, Toronto, ON M1R 0B6
(647) 868-9815 | farasha.rahman@gmail.com
https://github.com/farasha-meem
https://farasha-meem.github.io/portfolio/

OBJECTIVE

To gain practical experience by implementing existing skills and developing new ones in an industrial setting.

SUMMARY OF QUALIFICATIONS

- **Web Development:** Experienced in front-end and back-end web development. Skilled in HTML, CSS and jQuery for web design, as well as managing SQL server databases. Experienced in running CLI commands and maintaining version control for web application projects with Git and GitHub. Demonstrated excellent progress while creating a ASP.NET MVC framework web application from scratch, which was rewarded by a promotion to sole developer to complete the project cycle up to deployment of the product, using feedback from supervisor and test users.
- **Coding:** Highly experienced in Python through assignments, research projects as well as data science and machine learning practices. Substantial experience with creating web applications in Visual Basic and knowledgeable in C#. Skilled in SQL with experience in working with vast data sets for data science and machine learning, as well as interacting with databases for a web application.
- **Data Science and Machine Learning:** Worked with various data sets to solve both classification and regression problems, including time-series analysis, image classification and label predictions. Had exposure to the Hadoop environment with work done in both Scala and PySpark.
- **Physics and Astrophysics:** Knowledgeable in orbital mechanics, electromagnetic theory, non-linear systems and chaos theory, astrophysics of planetary systems, stars and galaxies, quantum physics and planetary geophysics. Experience with operating Ritchey-Chretien telescope at University of Toronto, Scarborough and stacking different exposures of images through programming to identify nebulae and galaxies.
- **Aerospace and Mechanical Engineering:** Exposure to the aerospace industry for 19 months. Knowledgeable in general and advanced dynamics and spacecraft control. Experienced in failure analysis through post-graduate courses and projects, as well as exposure in the landing gear industry test labs.
- **Research and Projects:** Completed research projects in industrial and academic settings both individually and in teams. Developed writing skills through creating reports on project progress and documentation for applications built. Experienced in delivering presentations to upper management as well as explaining high level concepts in layman terms to non-technical audiences.

EDUCATION

Masters of Engineering, Mechanical and Industrial Engineering   09/18-12/20
University of Toronto, Toronto
- Emphasis in Robotics and Mechatronics

Honors B.Sc., Physics and Astrophysics
University of Toronto, Scarborough   09/14-04/18
- Minor in Economics

RESEARCH PROJECTS

Implementation of Machine Learning in Exoplanet Detection   09/20-12/20
University of Toronto
- Applied machine learning models to NASA exoplanets datasets in order to classify confirmed exoplanets.

Time Series Prediction of COVID Cases in G7 Countries   05/20-08/20
University of Toronto
- Created predictions for number of COVID19 cases in G7 countries over various time intervals using statistical and machine learning techniques on time series data.

Application of Game Theory for Space Debris Removal   09/18-12/18
University of Toronto
- Implemented Game Theory principles in order to create a viable solution for removing space debris.

Simulating the formation of a multi-planetary system   01/18-04/18
Supervisor: Dr. Hanno Rein
University of Toronto, Scarborough
- Implemented Python coding with REBOUND package to simulate the initial conditions of the K2-138 system in order to determine possible formation scenarios.

EXPERIENCE

Lead Developer – Collins Aerospace   08/19-12/20
- Completed project cycle of creating a web application that is a viable product for use by the company
- Oversaw the testing of the web application and updated the application according to user feedback
- Supervised 3 student interns for 4 months to carry out supplementary work
- Prepared documentation for the application and delivered presentations to work with various departments for further funding and expansion of the project

Engineering Intern – Collins Aerospace   05/19-10/19
- Conducted research on the processes of creating a web application
- Built a web application from scratch for converting PDF to paper-based commercial and military engineering manuals into an interconnected digital platform
- Communicated with supervisor about the specific functional needs of the application, such as searching, creating and editing documents and, created the application accordingly
- Prepared reports on project updates and delivered progress presentations

Teaching Assistant – University of Toronto   09/20-04/21
- Conducted weekly tutorials to teach course content and assign tasks
- Graded assignments, labs, exams and, recorded marks in spreadsheet
- Assisted students with course material via email
- Attended weekly meetings with the course instructor to discuss course improvements

Operations Specialist – Red Waiter Specials   06/18-05/19
- Conducted research on newest food specials to improve list on company website
- Updated company website and kept records of changes on spreadsheet
- Collected appropriate images and updated company's social media via new posts

SKILLS

- **Coding:** Python, Visual Basic, C#, CLI, Latex, Markdown
- **Web Development:** HTML, CSS, JavaScript, jQuery, AJAX, JSON, Full Text Indexing, ASP.NET MVC Framework, SQL Servers
- **Data Science and Machine Learning:** Spark (Scala and PySpark), Hadoop Environment, SQL, Pipelines, supervised and unsupervised learning algorithms
- **Version Control:** Git, GitHub
- **Microsoft Office Products:** Word, Excel, PowerPoint, Access, Outlook
- **Spoken Languages:** English, Bengali, Hindi

HONORS, AWARDS AND CERTIFICATES

Responsive Web Design	**2021**
University of Sydney: Data-Driven Astronomy (Coursera Certificate Completion)	**2021**
UofT Institute for Multidisciplinary Design & Innovation Project Completion	**2020**
MITACS Research Training Award	**2020**
UofT Accessibility for Ontarians with Disabilities Act (AODA) Certified	**2019**
National Daily Star Award for Outstanding Academic Achievements	**2013**