**Md. Morshed Jamal**

[Portfolio](https://1morshed1.github.io/portfolio/)| [LinkedIn](https://www.linkedin.com/in/morshed-jamal-a2ab66170/) | 0179411049 | [Github](https://github.com/1morshed1)

**Education:**

**Bangladesh University of Engineering and Technology**

B. Sc in Mechanical Engineering Graduation Date: November, 2024

**Work Experience:**

**Team Interplaneter (B.U.E.T):** Jan 2019-Mar 2020

Member, Software Sub Team

* Implemented python scripts using OpenCV to detect objects of different geometrical shapes
* Implemented python scripts using OpenCV to detect ArUco markers
* Using python and QT5 developed GUI for the user to interact with.
* Built and tested programs using Docker.
* Experienced working with Raspberry Pi and Nvidia Jetson Xavier NX in order to remotely control the rover.
* Worked on Rviz and Gazebo simulation in R.O.S (Robot Operating System) to develop autonomous navigation system, obstacle avoidance and control for the six D.O.F arm of the rover

**Renata PLC:** Nov 2023-Dec 2023

Industrial Trainee, Internship

* Learnt about machine and building maintenance
* Engineering and risk management

**Projects:**

**Hand Gesture controlled six D.O.F arm:**

For third year project developed a six D.O.F robotic arm that can be controlled by the users’ hand gesture using flex sensor.

* Develop program using Arduino to read input from user and then drive the servo motors for movement of the robotics hand
* Using flex sensor got analog inputs which was then converted between upper and lower threshold to make the whole process smooth and easier
* The arm responded to all the finger movements and behaved accordingly

**Skills:**

**Data Analysis:** Python (Pandas, NumPy, Matplotlib, Scikit-learn), SQL, Tensorflow

**Machine Learning:** Supervised Learning, Unsupervised Learning, Deep Learning, Model Validation, Neural Networks

**Software Development:** Java, C, C++, Git, Docker, Bash

**Web Technologies:** HTML5, CSS3, Javascript

**Tools & Platforms:** Jupyter, Anaconda, OpenCV

**Languages:**

Bengali (Native), English (Full Professional Proficiency), German (Elementary), Chinese (Elementary), Spanish (Elementary), Hindi (Limited Proficiency)

**Other:**

Competitive Coder at:

* [Codeforces Profile](https://codeforces.com/profile/ilia_volyova)
* [Codechef Profile](https://www.codechef.com/users/ilia_volyova)