### Contact

www.linkedin.com/in/erb4058 (LinkedIn)

## Top Skills

Composite Structures
Topology optimization
Solid Mechanics

### Certifications

Certified SOLIDWORKS
Professional (CSWP) Prep

Finite Element Analysis Convergence and Mesh Independence

SOLIDWORKS CAD Design Professional (CSWP)

SOLIDWORKS Advanced Assemblies

Topology Optimization Using Ansys Mechanical

#### Honors-Awards

4th place, 2nd Kibo Robot Programming Challenge National Round

1st position, Sustainable Energy Innovation Challenge

Champion, National Stem Competition 2021

8th position, National Round of 6th Bangladesh Physics Olympiad 2016

Innovation Award, International Planetary Aerial Systems Challenge 2021

# **Emon Roy Bappy**

Research and Development Engineer at Cybernetics Hi-Tech Solutions

Dhaka, Bangladesh

## Summary

My background in Mechanical Engineering from Bangladesh University of Engineering and Technolog has accelerated my passion for electromechanical systems. I have a strong foundation in Military Robotics and Bio-Inspired Soft Robotics with extensive experience in computer-aided design, printed circuit board design, finite element analysis, fused deposition modeling, molding, composite manufacturing, and CNC manufacturing processes. Currently, I am passionately pursuing opportunities to advance soft robotics in healthcare applications.

# Experience

Cybernetics Hi-Tech Solutions (Pvt) Ltd. Research And Development Engineer July 2024 - Present (1 year 3 months)

Dhaka, Bangladesh

With my expertise in Finite Element Analysis, manufacturing processes, and Fused Deposition Modeling, I contribute significantly to the optimization of robotic structures. My competencies ensure that the robots are designed to be both robust and efficient, thereby enabling them to perform the rigorous tasks required in military applications.

Automaestro

2 years 8 months

Lead of Suspension Sub-team December 2022 - July 2024 (1 year 8 months)

Dhaka, Bangladesh

Member of Suspension Sub-team
December 2021 - December 2022 (1 year 1 month)

Dhaka, Bangladesh

**BUET Robotics Society** 

2 years 1 month

Vice President June 2023 - June 2024 (1 year 1 month)

Dhaka, Bangladesh

Publicity and Outreach Coordinator June 2022 - June 2023 (1 year 1 month)

Dhaka, Bangladesh

Spectrum Engineering Consortium Ltd. Research And Development Engineer June 2023 - June 2024 (1 year 1 month)

During my year-long internship with the R&D team at Spectrum, I had the opportunity to work on cutting-edge projects in the field of robotics and engineering. This internship provided me with invaluable experience in a collaborative and supportive environment, fostering both my technical skills and professional growth.

Runner Automobiles PLC
Manufacturing Process Engineer
November 2023 - November 2023 (1 month)
Mymensingh Division, Bangladesh

- 1. Acquired comprehensive knowledge of the three-wheeler manufacturing process, encompassing welding, painting, and assembly sections
- 2. Developed a thorough understanding of industrial automation processes and the application of industrial robotic arms
- 3. Conducted a detailed analysis to identify and recommend improvements to make the manufacturing process more efficient

Team Interplanetar 3 years 4 months

Project Leader of Electrical and Communications sub-team November 2022 - August 2023 (10 months)

Dhaka, Bangladesh

Member of Electrical and Communications Sub-team May 2020 - November 2022 (2 years 7 months) Dhaka, Bangladesh

Team Interplanetar, a multi-disciplinary team of undergraduate students from Bangladesh University of Engineering and Technology, participates in International Space-Robotics Competitions every year.

Website: https://buetinterplanetar.com/

## Education

Bangladesh University of Engineering and Technology
Bachelor of Science - BS, Mechanical Engineering · (April 2019 - July 2024)

Notre Dame College

· (May 2016 - December 2018)

Sylhet Government Pilot High School

· (January 2008 - October 2016)