

Jahir Uddin

112, North Ibrahimpur, Kafrul, Dhaka

+88 01926003436 | jahir.uddin@g.bracu.ac.bd | <https://jukomol.github.io> | github.com/jukomol | [linkedin.com/in/jukomol](https://www.linkedin.com/in/jukomol)

Major Achievement

Project Engineering Manager : Brac University's 2nd Nano Satellite Program, LaSSET

European Robotics League 2022: 4th position and Perseverance award

My Role: Project Engineering Manager, AI & Communication Lead

Media Coverage : The Business Standard, The Daily Star, NTV, Prothom Alo.

Education

BSc in Computer Science

Brac University

- Worked as a Research Assistant
- CGPA:** 3.29 out of 4.00 (124/124 credit)

May 2018 - Dec 2022

Dhaka, Bangladesh

Higher Secondary School Certificate

Adamjee Cantonment College

- GPA:** 4.92 out of 5.00

May 2015 - May 2017

Dhaka, Bangladesh

Secondary School Certificate

Feni Government Pilot High School

- GPA:** 5.00 out of 5.00

Jan 2010 - May 2015

Feni, Bangladesh

Work Experience

Research Assistant

LaSSET, Brac University

- Indigenous Mission Payload Design for 2U CubeSat
- Payload design for remote data collection using LoRa for 2U CubeSat
- DL based surface analysis for smooth navigation of UGV

Nov 2022 - Current

Dhaka, Bangladesh

Project Engineering Manager

BracU Dichari

- Developed an autonomous rescue rover and a drone employing cutting-edge technology while leading a team of forty people. For both the rover and the drone, we utilized SLAM and ROS.
- Developed Image Meta-Data manipulation system to construct 3D mesh.
- Employed Deep Learning based Mannequin detection with 95% accuracy. Moreover, developed a system for automated risk assessment.
- Technical Skills:** AI, Python, Embedded C, ROS, Linux, Git, Wireless Communication, Circuit Development

Jan 2022 - September 2022

Dhaka, Bangladesh

Technical Team Lead

BracU Mongol Tori

- Developed world's one of the finest Mars Rover. Lead 30 members team to make an intelligent rover.
- Designed vision and GPS based autonomous navigation system.
- Developed everything from scratch. Including navigation system and graphical user interface.
- Technical Skills:** AI, Python, Embedded C, OpenCV, Bash, Git.

Dec 2020 - Dec 2021

Dhaka, Bangladesh

DevOps Intern

InsideMaps Inc.

- Worked on 3D visualization and mapping technology.

Sep 2021 - Dec 2021

Dhaka, Bangladesh

Skills

Programming

Python (Pandas, django, tkinter, PyTorch, NumPy, Scikit-learn. etc.), ROS (Gazebo, Rviz, RQT, TF, etc.), Docker, JAVA, C/C++, HTML/CSS, JavaScript, SQL, MongoDB, OracleDB

Miscellaneous

Linux, Shell (Bash/Zsh), \LaTeX (Overleaf), Tableau, MS office 365, Git, Heroku, Proteus

Soft Skills

Leadership, Team Management, Time Management, Teamwork, Critical Thinking, Problem-solving, Documentation, Engaging Presentation.

Scholarship and Achievements

2022	4th & Perseverance Award , European Robotics League	Poland
2021	4th , KIBO Robot Programming Challenge	Bangladesh
2021	Global Finalist , Earth Observation Hackathon	USA
2021	9th , International Rover Design Challenge	India
2021	3rd , University Rover Challenge (URC)	USA
2017	Best Contributor Award , Neutrino ACC Science Club	Bangladesh
2016	National Champion , IBBL 2nd ACC National Science Carnival	Bangladesh
2015	Talentpool Scholarship , Secondary School Certificate Examination	Bangladesh
2013	Talentpool Scholarship , Junior School Certificate Examination	Bangladesh
2009	General-grade Scholarship , Primary School Certificate Examination	Bangladesh

Research Interests

Robotics	I love building intelligent machines. It excites me whenever I see a machine is making decisions itself. I have an interest in embodied AI in Robots.
3D SLAM	I have interests in autonomous navigation, self driving vehicle, simultaneous localization and mapping.
UAV	Autonomous Missions, Remote Sensing, 3D Mapping
Cube Satellite	Low power consumption and cutting edge AI on satellite

Languages

English	Professional proficiency
Bengali	Native proficiency

Publications

- Jahir Uddin, Muntasir Ahad, Abdulla Hil Kafi, Wireless Event Based Kill-switch for Safe & Autonomous UAV Operations, ICEIC 2023 (Accepted)
- Jahir Uddin, Firoz Wadud, Rezwana Ashrafi, Md. Khalilur Rhaman, Md. Golam Rabiul Alam, Landing with Confidence: The Role of Digital Twin in UAV Precision Landing, ICNS 2023 (Accepted)

Workshops

- UAVBuzz: Practical Approach To Build UAV, IEEE AESS BracU SC, MD Mojammel Haque Shourobh, Jahir Uddin, MD Firoz Wadud (2022)
- Bangladesh Mars Rover Conference, Mars Society Bangladesh, BracU Mongol Tori(Jahir Uddin, MD Firoz Wadud, Hashibul Islam), MIST Mongol Barota, IUT Avijatrik (2021)
- Workshop on Cyber Security, Jahir Uddin, RIGHT, Daffodil International University, Bangladesh(2020)

Volunteer and Social Works

Founder	July 2014 - Current
Ektu Anander Khoje	Feni, Bangladesh
<ul style="list-style-type: none">• It is a foundation that gives underprivileged kids access to sports equipment and educational resources.• Website	