Al Hasib Arafat

3rd Year Undergraduate Student, B.Sc. in **Software Engineering**, Daffodil International University, Birulia, Savar, Dhaka, Bangladesh
Call on: +8801302869321
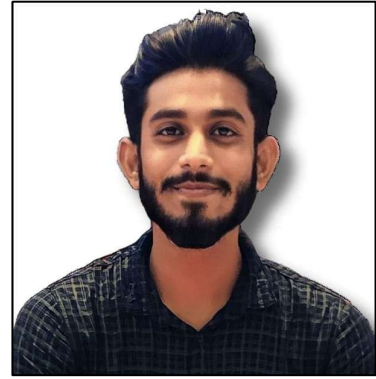**Email:** info.hasibarafat@gmail.com
GitHub: github.com/Hasib-Arafat |
 LinkedIn: linkedin.com/in/hasibarafat/
Date of Birth: 02 February 2004
Nationality: Bangladeshi

Gender: Male

CAREER OBJECTIVE

Passionate undergraduate student in Software Engineering, with a deep interest in **Robotics**(ROS), **Computer Vision**, **IoT**, **ML**, **AI** and **Drone and Defence Technology**. Eager to innovate and contribute to advanced research and technical projects while honing leadership and technical skills to drive impactful solutions in emerging technology fields of Bangladesh.
Always a dedicated learner.

RESEARCH & DEVELOPMENT INTERESTS

• Remote Sensing Application in Agriculture& Disaster Monitoring
• Satellite Image Processing & Feature Extraction Using Computer Vision
• AI-integrated Robotics and Unmanned Aerial System(UAS) for Terrain Mapping
• IoT and Embedded System for Environmental Sensing and Automation
• Slam/Digital Twin-based Navigation and Mapping for Ground and Aerial Robotics
• ROS-based Robotics Platforms for Smart Exploration and Monitoring
• Real-time Video Analytic for Climate and Crop Observations
• Agentic AI and Personal AI for Detection Support
• Human-AI Interaction in Scientific Research Action

ACADEMIC BACKGROUND

Bachelor of Science (BSc) in Software Engineering
Daffodil International University, Bangladesh
Session: Fall 2023 – Present (Expected Graduation: 2027)
Year: 3rd Year
Current CGPA: 3.4 on a scale of 4.00

Higher Secondary Certificate (HSC)
Dhaka City College, Dhaka (DCC)
Session: 2019–2020
Group: Science | Board: Dhaka
GPA: 5.00 on a scale of 5

Year of Passing: 2021

Secondary School Certificate (SSC)
Kushtia Zilla School, Kushtia,
Session: 2017-2018
Group: Science | Board: Jashore
GPA: 5.00 on a scale of 5
Year of Passing: 2019

AWARDS & RECOGNITION

National Champion and Global Nominee – NASA Space Apps Challenge 2024
Recognized for exceptional teamwork and innovation in developing solutions to global space and earth science challenges. Click Link

National Champion – National Science and Technology Week-2023 (4 day long exhibition competition)

Participant – BUET Robo Carnival-2024
BUET Automobile Carnival-2024
DUET TechFest-2024
IUT Mecceleration-2020

PROJECTS & EXPERIMENTAL WORK

• Car Parking Detection and Management System
• BD Currency Detection Device for Blind Community
• Drone-Based Mapping System
• Bomb Disposal Robot (range of 2 km)
• Fire Fighting Rescue Robot (range of 4 km)
• Blood Donation Management System (Dart/Flutter Based)
• Drone Assembly Project (Manual Flight Testing)
• Lost & Found Database Project (XAMPP + SQL)
• ROS1 Noetic/ROS2 Humble Turtlesim Projects (Publisher, Subscriber, Services, Actions)

LEADERSHIP & ORGANIZATIONAL ROLES

• Organizing Secretary, DIU Robotics Club
• Team Leader, Team Phoenix, NASA Space Apps Challenge-2024
• Sponser Team, TEDx DaffodilU
• Executive Member, Data Science Club,DIU
• Executive Member, Software Engineering Club, DIU
• Executive Member, BASIS Student Forum – DIU Chapter

TECHNICAL SKILLS

Languages: Python, C/C++, Java, Dart
Robotics & Embedded: ROS1, ROS2 (Humble), Gazebo, Fusion360(URDF), Raspberry Pi, Pixhawk, ESP32
Computer Vision: OpenCV, YOLO (Object Detection)
Database: MySQL, SQLite, Google Sheets API
App Development: Flutter (Dart), JavaFX (GUI apps)
Tools: Git,Google Colab, VS Code, Anaconda (Spyder), XAMPP
Others: UML, OOP, SDLC, Basic HTML

DIGITAL & COMPUTATIONAL SKILLS

Operating Systems: Windows, Linux (Ubuntu)
Robotics Tools: ROS1 Noetic, ROS2 Humble, Gazebo, RViz, Fusion360, TinkerCad
Data Visualization: Google Sheets, Excel
AI Tools: Local LLMs (LLaMA3), Basic LangChain IDEs:
VS Code, IntelliJ, Anaconda (Spyder), Arduino IDE

TRAINING & WORKSHOPS

• ROS1 Navigation & SLAM Beginner Workshop, SUST Autodrive
• OpenCV Hands-on Workshop, Self-directed
• Online Trainings – LangChain, Agentic AI, Object Tracking(OpenCV)
Machine Learning

LANGUAGE SKILL

• **Mother Language:** Bangali
• **Secound Language:** English

EXTRA-CURRICULAR ACTIVITIES

• Robotics Club Volunteer, Trainer, and Organizer
• Stage Performance, Stage Managing and Public Event Leading
• Data Science Event(AI in Education) Organizer
• Creating Tech Community for Collaboration Work
• Humanitarian Volunteering – Tech help, documentation
• Fund raising for humanitarian cause in Bangladesh-2024

ACADEMIC REFERENCES

1. Dr. Imran Mahmud
Professor & Head
Department of Software Engineering,
Daffodil International University
E-mail: headswe@daffodilvarsity.edu.bd
Phone: +8801711370502

2. Md. Shohel Arman

Assistant Professor,
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3. Md. Hafizul Imran

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Phone: +8801740064708

DECLARATION

I, Al Hasib Arafat, hereby declare that the above-mentioned information is true and correct to the best of my knowledge and belief. I understand that any false information may lead to disqualification.