



# Deabashis Sarker Tamal

Inspirational researcher and engineer currently doing a Master of Science in Internet of Things and Robotics Engineering. Has such experience, teaching full-stack, and is deeply involved with embedded systems, autonomous robotics and AI/driven software-hardware integration. Patent holder of an autonomous food delivery robot. Committed to research, mentoring and innovation focused to connect academic theory and real-world practice.

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## EDUCATION

**Master of Science in Internet of Things and Robotics Engineering** Running  
Gazipur Digital University, Areas: Robotics, Embedded Systems, Computer Vision, NLP

**B.Sc. in Software Engineering** (January 01, 2020 - February 13, 2024)  
Daffodil International University, Major: Robotics and Embedded Systems 3.23  
🔗 <https://daffodilvarsity.edu.bd>

**Shaheen College** (July 01, 2016 - June 11, 2019)  
HSC, Science 3.94

**Anuhola High School** (January 01, 2014 - May 16, 2016)  
SSC, Science 4.83

## TEACHING EXPERIENCE

**Instructor – Full-Stack Web Development-Pro** (July 10, 2025 - Present)  
Daffodil International University, Micro-Credentials Academy  
Delivered 72-hour course covering HTML, CSS, Tailwind, JavaScript, React, Vue, Node.js, Express, Laravel, WordPress, GitHub, MySQL, PostgreSQL, VPS, cPanel.  
Conducted hands-on coding labs, live projects, and mentoring sessions.  
Trained 20–30 students per batch on frontend and backend development.  
Introduced coding with AI tools and MERN stack applications.

## RESEARCH & INNOVATION

**Secured food delivery system and method using an autonomous mobile robot in outdoor settings**  
Patent (No: BD/P/ 2024/210, Approve: 1006967)

An innovative autonomous food delivery robot system designed for outdoor operation, addressing both efficiency and cost- effectiveness. The system integrates advanced technology with a focus on solving contemporary challenges in the field of autonomous mobile robotics. The robot is equipped with six honeycomb wheels, enhancing its mobility and drift capabilities, essential for navigating various terrains. It utilizes GPS for navigation, complemented by obstacle avoidance features, ensuring smooth and reliable delivery paths. A dedicated Robot Management System (RMS) is developed to streamline food order handling and robot job assignments, enabling real-time monitoring of robot performance and navigational data. The system employs multiple cameras for precise environment recognition, crucial for navigating complex outdoor environments. Additionally, a computer application is deployed for identifying authorized clients, guaranteeing secure and accurate food delivery. Emphasis on low-cost design and development ensures accessibility and scalability of the technology. This invention addresses and overcomes significant challenges in the development of outdoor autonomous mobile robots, offering an efficient, cost-effective solution for autonomous food delivery, setting a new standard in the field.

🔗 [https://dpdt.portal.gov.bd/sites/default/files/files/dpdt.portal.gov.bd/page/0913a61f\\_433c\\_41e2\\_a40b\\_09f0e2a6b442/2024-11-04-11-21-96e9aa9f9c44125619f4e3e9a8bf50cc.pdf](https://dpdt.portal.gov.bd/sites/default/files/files/dpdt.portal.gov.bd/page/0913a61f_433c_41e2_a40b_09f0e2a6b442/2024-11-04-11-21-96e9aa9f9c44125619f4e3e9a8bf50cc.pdf)

PROJECTS & ACADEMIC WORK

GPS-Based Vehicle Tracking & IoT Emergency Response System

Developed a GPS-based IoT tracking system with automated emergency response, reducing accident response time by 40%.

Autonomous Food Delivery Robot

Developed an ROS-based navigation system for an obstacle-avoiding delivery robot.

Bangladesh Biology Olympiad - IT Coordinator

Created an online exam platform and automated registration systems for students.

Byte Virus

URL Shorter

Byte Virus or bvirus is a url shorter site. Anyone can short url and share the url he can view the redirect history (Country, Devices, Redirects From) and here a user can add a extra url that redirect users when main url get a http error, also can make custom url.

🔗 <https://bvir.us/admin/>

INTERESTS

Robotics and AI Innovations	IoT & Edge Computing
Open-Source Hardware & Software Development	Software Optimization and Performance Engineering
R&D in Embedded Systems	Cybersecurity and Network Security
Autonomous Robotics & AI Integration	Scientific Research and Academic Writing
ROS-based Navigation and Path Planning	Embedded Systems and Sensor Fusion

WORK EXPERIENCE

Software Engineer (January 08, 2024 - Present)

VI Tech (Startup)

- Led the development of OLMS, integrating custom quiz generation, math equation support, and user analytics, improving student engagement by 30%.
- Worked on the backend system of InternBD, optimizing internship matchmaking for students and employers.

Founder & Chief Operating Officer (July 19, 2019 - Present)

Anun (Startup)

- Developed Android applications (Java) and backend systems (PHP) for a super app that transitioned from food delivery to social commerce.
- Integrated IoT-based systems for automation and smart solutions.
- Contributed to QA and product testing during development cycles.

Front-End Developer (August 09, 2020 - December 24, 2023)

OMEGA Express

- Designed and developed responsive UI/UX for business solutions.
- Worked closely with backend teams to integrate APIs and ensure seamless functionality.

LANGUAGES

Bengali	English
Native	Fluent

SKILLS

Embedded Systems & IoT Development Arduino, Raspberry Pi, ESP32, Jetson Nano	Circuit Analysis & PCB Testing Proteus
Networking & Router Configuration RouterOS, OpenWrt, Cisco , MikroTik	Robotics ROS, Autonomous Navigation, Obstacle Avoidance
Quality Assurance & R&D Report Writing	Robotic Process Automation UiPath RPA
Software Development Java, PHP, Python, JavaScript	Mobile & Web Development Android - Java, Frontend - React
Database Management MySQL, Firebase	R&D Tools Autodesk Fusion 365, Tinkercad, MATLAB
Product Prototyping 3d printing	Server Manage Nginx, Exim, Cpanel, VPS

VOLUNTEER EXPERIENCE

<b>Bangladesh Biology Olympiad</b> IT Coordinator  Bangladesh Biology Olympiad (BdBO) is a national competition that nurtures students' interest in biology and selects participants for the International Biology Olympiad (IBO). It organizes regional and national contests, along with training camps, to enhance students' knowledge and skills in biological sciences.	(January 01, 2020 - January 13, 2024)
<b>Bangladesh Biology Olympiad</b> Olympiad Coordinator  "Gram Pathagar Andolan" has become one of the prominent charitable organizations in Bangladesh. They are working to improve education infrastructure in Bangladesh, especially in remote areas.	(January 14, 2024 - Present)
<b>Gram Pathagar Andolan</b> Support Educational Infrastructure	