



MD FOYSAL

AHAMMAD JOY

WORK EXPERIENCE

Nagadhat Bangladesh Ltd., Dhaka

Web Application Intern

Feb 2025 – At Present

- Contributing to the development of an e-commerce platform, focusing on backend services and database optimization.
- Assisting in API development, testing, and debugging to ensure reliable transactions and system performance.
- Collaborating in agile workflows, including sprint planning, stand-ups, and peer code reviews.

EDUCATION

American International University- Bangladesh

Bachelor of Computer Science and Engineering
2021- 2025

Bikalpa Model College

Higher Secondary Certificate (HSC) - Science Group
2018 - 2020

Choudda Gram H. J. Pilot High School

Secondary School Certificate (SSC) - Science Group
2016 - 2018

SKILLS SUMMARY

LANGUAGE

- English - (Fluent)
- Bangla - (Native)
- Hindi - (Conversational)

Proficient in programming across multiple languages and frameworks, with experience in full-stack web development and efficient system design. Skilled in database management, algorithm development, and machine learning model evaluation. Experienced in collaborative research, technical writing, and applying embedded systems for practical solutions.

EXPERTISE

- Programming & Development:** C, C++, Java, Python, C#, PHP, JavaScript, TypeScript, React, Next.js, NestJS, Laravel, Tailwind CSS
- Databases & Tools:** MySQL, PostgreSQL, Oracle, Git/GitHub, Postman, AutoCAD
- Artificial Intelligence & Machine Learning:** FT-Transformer, Gradient Boosting, XGBoost, Random Forest, SVM, KNN, Data Preprocessing, Model Evaluation
- Hardware & Embedded Systems:** Arduino microcontrollers, sensors, and automation projects
- Research & Academic Skills:** IEEE publication, thesis research, academic writing, experiment design, technical documentation
- Professional Skills:** Leadership, teamwork, critical thinking, problem-solving, adaptability, communication

ACADEMIC PROJECTS

- Assistive System & GPS Tracker for the Visually Impaired** - Designed a wearable system using Arduino, ultrasonic sensors, and GPS for navigation and real-time location tracking.
- Petrol Pump Management System** - C# & SQL Server application for fuel, staff, supplier, and invoice management with secure role-based access.
- Family & Notes Management System** - Java console app using OOP and file handling for record and reminder management.
- Library Management System** - PHP & MySQL web app for managing books, members, and borrowing records (XAMPP).
- Modern City Simulation** - C + OpenGL/GLUT graphics project simulating buildings, vehicles, and animations.

RESEARCH & PUBLICATIONS

- Assistive System and GPS Tracker for the Visually Impaired**

26th International Conference on Computer and Information Technology (ICCIT 2023), IEEE, Cox's Bazar, Bangladesh

Authors: Niyaz Al Mahmud, Tazdik Hossain, Richard Victor Biswas, Md Foysal Ahammad Joy, et al.

Published in IEEE Xplore.

DOI: 10.1109/ICCIT60459.2023.10441487

- A Comparative Analysis of Machine Learning Models for Enhancing Human Activity Recognition Systems**

Submitted to International Conference on Multidisciplinary Computer Science, Electrical, Business & Literature (2025), Radisson Blu, Dhaka, Bangladesh

Status: Under Review

Authors: Md Foysal Ahammad Joy, et al.

- Predicting Thyroid Disorders with Multi-Model Machine Learning Techniques**

Undergraduate Thesis, American International University-Bangladesh (2025)

Authors: Md. Habib-Ul-Alam, Md Foysal Ahammad Joy, Najla Alam Navana, Dipta Banik

Supervisor: Rahul Biswas

ACADEMIC PROJECTS

- Word Chain Game** - Python game implementing word-chaining logic with string handling and functions.
- Astro - E-Commerce Website** - Full-stack MERN app with product browsing, cart, checkout, and admin dashboard.
- E-Commerce Management System (SRS)** - Software documentation project with UML diagrams, Agile plan, and ROI analysis.
- Wonder Guide for International Tourists** - Software documentation project with requirement analysis, UML diagrams, and system design for a tourist assistance platform.