

I am a **Computer Science & Engineering graduate** and a dedicated **problem solver** with a strong track record on **Codeforces** and **LeetCode**. I have hands-on experience in **Full-Stack Development** and **Machine Learning**, with **15+ real-world projects** including mobile apps, web platforms, and intelligent systems.

I specialize in building **real-world, data-driven solutions** by creating **custom datasets**, developing **ML models**, and integrating **REST APIs** for practical applications such as environmental monitoring and smart systems. With experience in **Flutter**, backend development, and **Linux-based deployment**, I bridge the gap between **AI research** and **production-ready software**.

My objective is to work as a **Junior Software Engineer** in a **growth-oriented organization** where I can build **scalable and impactful applications** while continuously enhancing my skills in **mobile development**, **web technologies**, and **artificial intelligence**.

SKILLS

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| Programming | Python, C++, Java, PHP, JavaScript, Dart, TeX |
| Frameworks & Tools | Flutter, Laravel, HTML/CSS, Firebase, REST API Integration, IoT Systems |
| Machine Learning | Computer Vision, Hybrid ML Models, Custom Dataset Creation, Model Evaluation |
| Data & Research | Data Analysis, Google Earth Engine (GEE), Environmental Data Processing |
| Problem Solving | Data Structures & Algorithms, Competitive Programming (Codeforces, LeetCode) |
| Systems & DevOps | Git, GitHub, Docker, Ubuntu/Linux Administration, Windows Environment |

TECHNICAL EXPERIENCE

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| Hybrid ML-Based Real-Time Traffic Sign & Vehicle Detection System <i>Computer Vision, Deep Learning</i> <ul style="list-style-type: none">Curated a custom dataset of 9,000+ annotated Bangladeshi traffic-sign images.Implemented a YOLO/Hybrid ML pipeline for real-time sign and vehicle detection.Developed a Streamlit-based web application supporting image, video, and live camera inference.Optimized performance for crowded and low-light road environments. | 2024–2025 |
| Air Quality Index Monitoring Platform <i>Google Earth Engine(GEE), Weather API, Data Analysis</i> <ul style="list-style-type: none">Built an environmental monitoring system using Google Earth Engine (GEE).Processed satellite data to compute and visualize Air Quality Index (AQI) trends.Integrated REST APIs to fetch real-time environmental data.Designed dashboards for spatial and temporal analysis of pollution levels. | 2025 |
| IoT-Based Health Monitoring Band With MobileApp <i>Flutter, Firebase, Embedded Systems</i> <ul style="list-style-type: none">Built a wearable health-monitoring band using ESP8266, MAX30100, GPS, and temperature sensors.Developed a Flutter mobile application for real-time data visualization and alerts.Integrated Firebase for live cloud synchronization and remote monitoring. | 2024 |
| FoodHaven Flutter-Based Food Ordering App <i>Flutter, UI/UX, State Management</i> <ul style="list-style-type: none">Developed a complete Flutter app for food ordering and delivery.Implemented product listing, cart, OTP authentication, and responsive UI.Integrated backend services for order processing and user profiles. | 2024 |
| TrendyTreasure - Online GiftShop <i>PHP, MVC, Web Development</i> <ul style="list-style-type: none">Developed a full PHP e-commerce gift shop targeting students and professionals.Built product catalog, shopping cart, checkout, and admin dashboards.Applied MVC architecture and server-side validation. | 2023 |
| Six Seasons – OpenGL Seasonal Animation <i>OpenGL, Computer Graphics, C++</i> <ul style="list-style-type: none">Designed a graphical simulation showing six seasonal environments using OpenGL.Implemented animated elements such as weather, rain, snowfall, and lighting transitions.Optimized rendering performance and scene composition for smooth visualization. | 2023 |
| E-Learning Platform <i>Web Development, PHP, MySQL</i> <ul style="list-style-type: none">Developed for course management and student access, user authentication, content management, and progress tracking.Designed database schema and backend logic using PHP and MySQL. | 2023 |

EDUCATION

Bachelor of Science in Computer Science & Engineering
Bangladesh University of Business and Technology (BUBT)
CGPA: 3.67/4.00

Jan 2022 – Dec 2025

Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Database Systems, Software Engineering, Computer Networks, Machine Learning, Artificial Intelligence, Operating Systems, Cyber Security & Forensic Digital, Internet of Things(IoT), Computer Network.

COURSES AND CERTIFICATIONS

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| • Beginner’s Guide to Competitive Programming using C++ — Udemy | 2022 |
| • Mastering Java SE Programming: From Beginner to Master — Coursera | 2023 |
| • Flutter & Dart: The Complete Guide — Udemy | 2024 |
| • Machine Learning A-Z™: AI, Python & R + ChatGPT Bonus — Udemy | 2025 |
| • The Complete JavaScript Course: From Zero to Expert — Udemy | 2025 |

ACTIVITIES

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| Contestant, ICPC Asia Dhaka Regional Contest – BUBT (Preliminary Round) | 2023 |
| Contestant, BUBT Intra University Programming Contest | 2023 |
| Volunteering, ICPC Asia Dhaka Regional Contest – BUBT [Main Event] | 2023 |
| ICT Lead, ESAB BUBT Unit | Fall 2023- Spring2024 |
| Strategic Member, BUBT IT Club | 2024 |
| First Place, <i>Brainstorming</i> – Project Showcase | Spring 2024 |
| First Place, <i>Brainstorming</i> – Poster Presentation on Machine Learning | Spring 2024 |
| First Place, <i>Brainstorming</i> – Research Paper Presentation | Fall 2025 |
| Volunteering, Technical Team Lead, ICPC Asia Dhaka Regional Contest – BUBT [Main Event] | 2025 |

REFERENCES

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