# Curriculum Vitae



## RAKIBUL HASAN SHAKIL

Full Stack Machine Learning Engineer
Researcher
Data Analyst

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🏠 Basundhara R/A, Dhaka, Bangladesh

### Skills

Machine Learning · Deep Learning · C++ · Java · C# · .NET Core

HTML & CSS · PHP · JavaScript · Python · TensorFlow · NLP

## CAREER OBJECTIVE

Specialized in Data Analytics, Machine Learning, and Full-Stack Web Development. Experienced in transforming data into actionable insights, building intelligent systems, and developing scalable end-to-end applications. Passionate about teaching and mentoring, with a strong ability to explain complex technical concepts in a clear and practical manner. A disciplined learner and problem-solver with hands-on project experience across analytics, ML models, and modern web technologies.

## EXPERIENCE

### Research Associate

Smile Care Limited, Dhaka, Bangladesh

*2025 – 2026*

- Conducted applied research resulting in two journal manuscripts currently under review.
- Submitted manuscript titled *"A Comparative Analysis of Machine Learning, Deep Learning, and Explainable AI Models for Fraud Detection in Large-Scale Credit Card Transactions"*, focusing on performance, interpretability, and scalability.
- Submitted manuscript titled *"Fairness-Aware Evaluation and Mitigation of Demographic Bias in ECG Classification"*, addressing bias detection and mitigation in medical AI systems.
- Analyzed large-scale clinical and transactional datasets to extract actionable insights.
- Collaborated with cross-functional research teams to develop models, validate experimental results, and prepare journal submissions.

### Student Assistant

Department of Computer Science, American International University-Bangladesh, Dhaka

*2025 – 2026*

- Assisted students with course registration issues, academic system navigation, and program-related inquiries.
- Provided guidance to students on course requirements, prerequisites, and academic planning.
- Supported faculty members with administrative and academic tasks related to course coordination.
- Assisted in managing course materials, student records, and technical documentation.
- Helped maintain smooth communication between students and faculty within the department.

# PROJECTS

## Doctor HUB

Java •Patient-doctor communication and appointment handling system

- Developed secure real-time chat module between patients and doctors.
- Implemented automated appointment booking & schedule management dashboard.
- Integrated doctor availability prediction based on previous appointments.

## Hotel Management System

HTML, CSS, PHP, JavaScript •End-to-end booking management platform

- Created interactive reservation and billing interface with automated invoice generation.
- Developed admin dashboard for room availability, customer records & payment tracking.
- Improved UI/UX for faster navigation and smoother check-in/out workflows.

## Dhaka Subway Reservation System

C# •Ticketing, scheduling & seat reservation

- Designed metro ticket-selling interface with dynamic pricing support.
- Implemented smart seat assignment algorithm preventing overbooking.
- Added printable digital ticket generation with QR verification.

## Floor Cleaning Robot

ESP32 • Arduino IDE • Motor Drivers • Sensors

- Designed an autonomous floor-cleaning robot using ESP32.
- Integrated L298N drivers for brush & wheel control.
- Obstacle detection using IR and ultrasonic sensors.

## IoT + ML Crop Recommendation

IoT Sensors • ML Models • Smart Agriculture

- Built ML model to predict suitable crops using environmental sensor data.
- Optimized features for improved model performance.
- Published research on AI-driven agricultural decision systems.

## ACADEMIC QUALIFICATIONS

| DEGREE | INSTITUTION | YEAR | RESULT |
|---|---|---|---|
| BSc in Computer Science & Engineering | American International University-Bangladesh (AIUB) | 2026 | CGPA:3.77 |
| Higher Secondary Certificate | BAF Shaheen College, Chittagong | 2021 | GPA: 5.00 |
| Secondary School Certificate | Railway Publuic High School | 2019 | GPA: 4.89 |

## LANGUAGES

English (Fluent), Bangla (Native), Urdu, Hindi

## INTERESTS

Problem Solving, AI in Education, Research, IoT & Embedded System, Travelling.

## ONLINE PROFILES

🌐 Portfolio Website: https://rh-shakil.vercel.app/
🧑 GitHub: https://github.com/rakibulhasanshakil
💼 LinkedIn: https://www.linkedin.com/in/rakibul-hasan-shakil/

## REFERENCES

| | |
|---|---|
| **Dr. Razuan Karim**<br>Associate professor,<br>Department of Computer Science,<br>American International University-Bangladesh | Email: rkarim@aiub.edu |
| **Mr. Abhijit Bhowmik**<br>Associate Professor,<br>Department of Computer Science,<br>American International University-Bangladesh | Email: abhijit@aiub.edu |