

MD. ARMAN HOSSEN RIPON

Software Developer & AI/ML Engineer | CSE Undergrad @ Daffodil Int. University ('28)

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PROFESSIONAL SUMMARY

Computer Science & Engineering undergraduate at Daffodil International University (Class of 2028) with a strong foundation in Data Structures & Algorithms (DSA), backend systems, and AI/ML fundamentals. Experienced in building mobile applications with Kotlin/Android, desktop software with Java/JavaFX, full-stack systems with PHP & MySQL, and responsive web platforms. Proven algorithmic rigor across global competitive programming platforms including Codeforces, LeetCode, CodeChef, AtCoder, Beecrowd, and Toph.

TECHNICAL SKILLS

Languages: C, C++, Java, Kotlin, Python, PHP, JavaScript (ES6+), SQL, HTML5, CSS3

Frameworks & UI: Android SDK (Kotlin Coroutines), JavaFX, Tailwind CSS, Chart.js

Backend & Systems: MySQL, RESTful APIs, Linux / POSIX Shell, Windows, macOS, Git / GitHub, Arduino

AI / ML & Tools: AI/ML Fundamentals, Retrieval-Augmented Generation (RAG), Chatbase AI, Hugging Face, Ollama, VS Code, PyCharm, IntelliJ IDEA, Eclipse, Antigravity IDE, Blender, Adobe PS/PR/AU/AI

Core Competencies: Data Structures & Algorithms (DSA), Object-Oriented Programming (OOP), Database Design, System Optimization

FEATURED PROJECTS & SOFTWARE SYSTEMS

IrrigaTech // Smart Irrigation Android Application

[Code]

Kotlin, Android SDK, Coroutines, Material Design

- Engineered a native Android mobile application for agricultural soil monitoring and automated precision irrigation schedules.
- Implemented background thread scheduling using Kotlin Coroutines to process simulated sensor telemetry with minimal battery consumption.
- Designed an intuitive, responsive mobile user interface adhering strictly to Google Material Design standards.

Asha Bank // Banking Management System (BMS)

[Code]

PHP 8, MySQL, JavaScript, Chart.js, Role-Based Access Control

- Developed an ACID-compliant digital banking platform featuring role-based access control (RBAC) across Admin, Teller, and Customer roles.
- Implemented atomic balance debit/credit routines and immutable transaction logs to guarantee financial auditability and prevent race conditions.
- Integrated interactive real-time telemetry dashboards using Chart.js for tracking user activity and financial volume.

StudentNest // Campus Housing Portal

[Code]

Java, JavaFX, OOP Architecture, Desktop CSS

- Built an object-oriented Java desktop application helping students find homes, rooms, or seats near campus based on budget and location.
- Implemented structured multi-criteria filtering algorithms and clean desktop UI views styled with JavaFX CSS.

UNLOCKEDSTUDIO // Digital Comic Publishing Platform

[Live] [Code]

HTML5, CSS3, JavaScript, Canvas API, Vercel

- Designed a collaborative web storefront and publication viewer for showcasing digital comics and creative assets.
- Implemented a hardware-accelerated 60 FPS starry particle background using the HTML5 Canvas API and modern glassmorphic UI styling.

AHRN Portfolio // Developer Portfolio Site

[Live]

HTML, CSS, JavaScript, Google Sheets API

- Built a personal developer portfolio featuring custom cursor tracking, scroll-reveal transitions, and Google Sheets API contact form automation.

Fitness Chatbot // AI Assistant

[Live] [Code]

Chatbase AI, HTML5, CSS3, JavaScript

- Academic web application integrating an AI chatbot to demonstrate conversational health guidance and responsive UI design.

EDUCATION

Bachelor of Science in Computer Science & Engineering (BSc in CSE)

2024 – 2028 (Expected)

Daffodil International University (DIU), Dhaka, Bangladesh

- Core Curriculum: Data Structures & Algorithms (DSA), Backend Systems, Database Management, AI/ML Fundamentals, Computer Architecture

Higher Secondary Certificate (HSC) — Science

Completed

Govt. Shah Sultan College, Bogura, Bangladesh

GPA 5.00 / 5.00

Secondary School Certificate (SSC) — Science

Completed

Bogra Zilla School, Bogura, Bangladesh

GPA 5.00 / 5.00

COMPETITIVE PROGRAMMING

- **Codeforces:** ArmanHossenRipon
- **LeetCode:** ArmanHossenRipon
- **CodeChef:** armanhossencs
- **AtCoder:** TRYFINDME
- **Beecrowd:** Profile 947888
- **Toph:** Arman_Hossen241