SAYANI GHOSAL

Kolkata, West Bengal, India | sayani.ghosal2024@iem.edu.in | linkedin.com/in/sayani-ghosal-210a3a328 | github.com/SAYANI-AI-68-2C

PROFESSIONAL SUMMARY

B.Tech Computer Science and Engineering (Artificial Intelligence) student graduating in 2026, seeking Machine Learning Engineer, Data Analyst, or Software Engineer (entry-level) roles. Hands-on experience in machine learning, computer vision, embedded systems, and full-stack application development using Python, C, and Java. Skilled in data analysis, data preprocessing, feature engineering, fraud detection, and anomaly detection. Demonstrated leadership delivering AI-driven solutions from concept to implementation, backed by competition wins and technical certifications in cloud computing and generative AI.

CORE SKILLS

Languages: Python, C, Java, JavaScript, R Programming

AI & Machine Learning: Machine Learning, Deep Learning, Computer Vision, TensorFlow, Keras, OpenCV, Fraud Detection, Anomaly Detection, Generative AI

Data & Analytics: Data Analysis, Data Preprocessing, Feature Engineering

Embedded Systems: Arduino, Raspberry Pi, Embedded Systems, IoT (Bluetooth / Wi-Fi)

Tools & Cloud: AWS, Git, GitHub, Microsoft Copilot, Full-Stack Development

EDUCATION

University of Engineering and Management, Kolkata — **Expected 2026**
Bachelor of Technology in Computer Science & Engineering (Artificial Intelligence)

Sainthia High School — **2024**
Senior Secondary (Class XII)

Deriapur Anchal High School — **2022**
Secondary (Class X)

PROJECTS

AI-Powered Smart Helmet (Group Project) — **January 2025**

- Engineered an AI-powered smart helmet using Python and C/C++ with TensorFlow and OpenCV, integrating Raspberry Pi, sensors, and Bluetooth/Wi-Fi modules for real-time data communication.
- Built real-time accident detection, alcohol sensing, and drowsiness monitoring features to improve rider safety through continuous embedded sensor data processing.
- Authored the system design and evaluation report submitted in partial fulfillment of the B.Tech degree in CSE (AI).

Smart Expense and Budget Tracker — **February 2025**

- Developed a full-stack Python application to track personal expenses and manage budgets, including expense categorization and budget monitoring modules.
- Applied data preprocessing and analysis techniques to summarize spending patterns and support user financial planning.

CERTIFICATIONS

- **Programming with Generative AI** – NPTEL Swayam (September 2025)
- **AWS Cloud Support Associate (Professional Certificate)** – Amazon Web Services (November 2025)
- **AI Productivity with Microsoft Copilot** – Microsoft (December 2025)
- **Data Analysis with R Programming** (March 2026)
- **Information Theory** (March 2026)
- **Advanced System Security Topics** (October 2025)

LEADERSHIP AND ACHIEVEMENTS

- **Won 1st Position, CodeSprint** – Converge 2026 (IEEE Computer Society).
- **Won 3rd Position, Converge Creator** – Converge 2026 (IEEE Computer Society).
- **Third Runner-Up, ML Canvas 4.0** – Business / technical pitch competition (January 2026).
- **Led development of Smart Library Management System** with recommendation, to-do list, and performance-tracking features as part of TechEd, Innovation and Entrepreneurship Development Center (IEDC), Dept. of CSE (AI & AI-ML), UEM Kolkata.
- **Completed Internship Common Aptitude Test** – January 2026.