ABITATHA ROY

abitatharoy@cic.du.ac.in | github.com/AbitathaRoy| leetcode.com/u/abitatharoy
linkedin.com/in/abitatha | +91-9836962506

Headline

Enthusiastic undergraduate with a strong foundation in mathematics, programming, and bioinformatics. Actively gaining experience in UI/UX and data science through projects and self-driven learning. Eager to contribute to interdisciplinary roles that blend analytical thinking, coding, and creativity in both academic and practical settings.

Education

B.Tech. Information Technology and Mathematical Innovations — **Expected:** 2027
Cluster Innovation Centre, University of Delhi — **Agg. Percentage:** 86.7%
Minor Stream: Computational Biology

High School Diploma – Indian School Certificate (ISC) — 2023
Calcutta Public School, Kalikapur — **Agg. Percentage:** 97.0%

Experience

Core Team Member and Outreach Coordinator — 02/2025 – 04/2025
CONVOKE DU CIC

- Managed the organization of the fest, closed deals with 6 companies and obtained funding worth ₹7,000 and other perks.

Research Intern — 01/2024 – 03/2024
Beyond Chats

- Conducted market research and SWOT analysis on the competitors' offerings.
- Analyzed the company's chatbot for 6 brands, identifying and reporting anomalies, leading to a 70% boost in performance and 40% in revenue.

Community Manager Intern — 10/2024 – 01/2024
Beyond Exams

- Moderated and engaged with over 10 online student communities.
- Assisted trial classes and cohort batches, converted ₹12,000 worth of sales, and provided personalised monitoring of student progress.

Projects

Implementation of Chaos for Secure Communication using Chua Diode — GitHub
Tech Stack: LTspice, Chaotic Circuits

- Performed simulation of an optimized circuit constructed using readily available components demonstrating secure data transmission using chaotic signals from a Chua diode.

Career Transitions and Candidate Evaluation through Probabilistic Modelling — GitHub
Tech Stack: R, Markov Chains, Bayes' Theorem

- Performed modelling, inferential analysis and predictive analysis on career transitions using Markov Chains.
- Performed probabilistic modelling on hiring possibilities based on resume parameters using Bayes' Theorem.

Two-Compartment Model to Simulate the Flow of Water in a Crop — GitHub
Skill Stack: Mathematica, Ordinary Differential Equations

- Represented a single crop system using the two-compartment model (ODE).
- Corroborated field data with model parameters to simulate the flow of water in the system and analyze the feasibility of this model for this purpose.

Certifications

IBM Data Science Professional Certificate – Coursera (Ongoing) — Link

Microsoft UX Design Professional Certificate – Coursera (Ongoing) — Link

Quantum Computing and Post-Quantum Cryptography – University of Delhi (02/2025) — Link

Google Prompting Essentials – Coursera (01/2025)   Link

Virtual Job Simulations – Forage (12/2024)   Link
Technical Consulting (SAP USA) | Operations (Goldman Sachs)

Data Structure and Algorithms using Java – NPTEL (11/2024)   Link

Calculus of Several Real Variables – NPTEL (10/2024)   Link

Technical Communication for Engineers – NPTEL (09/2024)   Link

Skills

Technical Skills: Algorithms, Computer Systems Architecture, Data Structures, Operating Systems, Data Analysis, Engineering Mathematics, Prompt Engineering, Technical Communication

Programming Languages: C, Java, Python, R, SQL, Mathematica

Soft Skills: Attention to Detail, Problem Solving, Cross-functional Collaboration, Time Management, Ethical Decision Making, Effective Communication, Professionalism

Languages: Bengali (Fluent), English (Fluent), Hindi (Fluent)