Apratim Dutta

🏠 apratim.tech ⓖ apru02 in apratim-dutta ✉ duttaapratim11@gmail.com 📞 9337316233

EXPERIENCE

SITEMASTER | Software Development Engineer Intern
Feb 2024 – Current | Kolkata, India

- → Developed an Android application using React Native, enhancing mobile user experience for **500+** MAU (Monthly Active Users)
- → Integrated push notifications via Firebase Cloud Messaging, increasing user engagement by **45%**.
- → Implemented and integrated REST API calls to facilitate seamless data communication between frontend and backend services, improving response time by **30%**
- → Collaborated closely with the application testing and user experience teams to refine the UI based on direct feedback from end-users.

PROJECTS

EVENT MANAGEMENT DASHBOARD | React | NodeJs | Fullstack
2023

- → Developed a MERN stack application for creating, managing, and tracking events efficiently.
- → Implemented features such as task checklists, collaboration tools, and meeting scheduling using Express.js
- → Enabled CRUD operations with MongoDB, allowing admins to add, edit, and delete event data seamlessly.

PREDICTIVE CRIME ANALYSIS | Python | React | Scikit-learn | Fast-api
2024

- → Analyzed **500k+** Karnataka crime records(2016-24) with Python and Power BI, revealing spatial trends and socio-economic patterns.
- → Conducted in-depth Exploratory Data Analysis (EDA) on crime types and demographics, uncovering **15+** key insights.
- → Built a machine learning model to predict crime rates on an hourly basis and trigger alerts during high-risk periods, optimizing police beat deployment.

TEST SECURE | NodeJS | React
2024

- → Designed a secure examination paper distribution system ensuring **100%** exam integrity and confidentiality.
- → Implemented role-based authentication and authorization for **3** distinct roles: administrators, examiners, and invigilators.
- → Utilized **AES-256 CTR** encryption for secure paper upload and management, including version control.

ACHIEVEMENTS

- → Secured a spot in the on-site final round of the ODOO COMBAT 2024 Hackathon for the project "Test Secure," ranking among the top **150** teams from a pool of **2500+** teams.
- → Achieved a **3-star** rating on CodeChef (Highest Rating: **1731**) and a "Specialist" rank on Codeforces with a rating of **1460**.
- → Solved over **700** problems across programming platforms including LeetCode, GeeksforGeeks, Coding Ninjas, CodeChef, and Codeforces.

SKILLS

PROGRAMMING

Proficient:
Python • SQL • CSS • HTML

Experienced:
Javascript • C++ • MongoDB

Familiar:
Java • TypeScript

LIBRARIES/FRAMEWORKS

Node.js • React.js • React Native • Expo • Fast-API • Scikit-learn

TOOLS/PLATFORMS

Git • Webpack • Firebase Postman • Docker

EDUCATION

IIEST, SHIBPUR
Bachelor's in Information Technology
Dec 2021 - Present | Kolkata, WB
CGPA: 8.38 / 10

CODING PROFILES

- ⓔ **leetcode.com/apru_02**
- ⓒ **codeforces.com/apru_02**
- 🍳 **codechef/apru_2002**