# Aditya Apurba





## Education

#### Indian Institute of Technology, Dhanbad

Expected May 2026

Integrated Master of Technology in Mathematics and Computing (GPA: 8.47 / 10.00)

Dhanbad, Jharkhand

• Coursework: Data Structures and Algorithms (C++), Operating Systems, Object Oriented Programming (C++), Machine Learning (Python), COA, Linear Algebra, Data Mining, Cryptography, DBMS (MariaDB)

#### Experience

**Zenden** Aug 2024 – Oct 2024

Software Engineer Intern

Remote

- Designed a dynamic signup flow with popups for phone number verification via OTP and profile photo upload, improving user registration efficiency by 20%.
- Utilized Paytm for seamless payment processing, reducing transaction time by 15% and automating payment updates.

#### **Projects**

**CasaByte - RealEstate App** | Github | Link | React.js, Node.Js, Express.Js, MongoDB, Firebase, Bootstrap

- Designed and launched CasaByte, a fully functional real estate marketplace for property buying, selling, and renting.
- Integrated **Firebase** for image uploads and implemented interactive features like **Map integration**, Like/Unlike, agent connections, and profile creation, enhancing engagement and user retention.
- Engineered a secure backend with Express, Node.js, MongoDB, and JWT managing user authentication, listing administration, and password resets, while ensuring data integrity and scalability.

PinWit - Map. Pin. Review. Share. | Github | React.js, Node.Js, Express.Js, MongoDB

- Built a real-time travel map application using the **MERN stack (MongoDB, Express, React, Node)** with secure user authentication and personalized login/registration features.
- Enabled users to pinpoint locations, leave reviews, and provide ratings using **MapLibre**, while facilitating seamless communication and displaying reviews and ratings for specific locations to improve overall satisfaction.

CodeMetrics - A Competitve Programming Dashboard | Github | Link | React.js, API, Chart.Js

- Developed a **data visualization** dashboard for analyzing Codeforces profiles, enabling users to gain insights and improve their performance in competitive programming.
- Incorporated dynamic graph and pie chart visualizations using **Chart.Js** to comprehensively analyze a user's performance and progress on Codeforces.

## Technical Skills

Languages: C, C++, Python, JavaScript, TypeScript, SQL

Technologies: React.Js, Node.Js, Express.Js, Next.Js, JQuery, Scikit-learn, PyTorch, TailwindCSS, EJS, Bootstrap, CUDA

Databases: MongoDB, Mongoose, MySQL, Firebase, Prisma

Concepts: Operating System, OOPS, Machine Learning, Neural Networks, Web Development, API Development, DBMS

#### **Achievements**

- Attained a rating of 1578 (specialist) on Code forces.
- Achieved 1817 (4\*) [Top 2%] rating securing Global Rank under 4500 at Code chef.
- Attained Rank of 252 in Starters 119 Division 2 and 1024 in Think-cell Round-1 with 20,000+ participants.
- Secured the 2nd rank in the Pick-a-Bot Challenge of Concetto'22 organised by IIT Dhanbad.
- Completed Machine Learning specialization By Andrew Ng- Certificate
- Complete Web Development Boot-camp By Angela Yu- Certificate

## Social Engagements

Mentor: DSA and CP division at Society for Industrial and Applied Mathematics (SIAM) of IIT Dhanbad.

Volunteer: at KARTAVYA - NGO run by students of IIT Dhanbad to educate underprivileged childrens.

Sports-Engagements: Badminton, Chess, Football.