

## EDUCATION

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### Indian Institute of Technology Dhanbad

Bachelor of Technology in Mineral and Metallurgical Engineering; GPA: 7.03 / 10

Dhanbad, Jharkhand

Expected May 2026

## PROJECTS

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### Krishi Sakha - Fertilizer Recommending Website

[Github](#)

React.js, Node.js, Express.js, MongoDB, Tailwind CSS

- Developed a full-stack web application to **deliver personalized fertilizer recommendations** based on soil, crop, and weather data.
- Designed and implemented responsive front-end components with **React.js** and **Tailwind CSS**, improving user experience and accessibility for farmers and agricultural professionals.
- Engineered the backend with **Express.js**, **Node.js**, and **MongoDB** to manage data processing, storage, and API integrations efficiently, optimizing data handling and system reliability.
- Collaborated on **integrating machine learning models** for predictive analysis, improving recommendation precision and supporting sustainable agricultural practices.

### FitFusion – AI-Driven Fitness Tracking System

[Github](#)

Node.js, Express, FastAPI, MongoDB, XGBoost, Python

- Developed and optimized **backend APIs** for user management, activity tracking, and goal setting, supporting efficient data handling and storage with **MongoDB**.
- Integrated an **XGBoost** machine learning model to classify workouts and generate **AI-driven recommendations**, improving user experience.
- Built a **FastAPI service** to deliver real-time insights, optimizing workout plans and progress tracking for personalized fitness goals.

## PROGRAMMING SKILLS

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**Languages:** C, C++, TypeScript, JavaScript

**Technologies:** React.js, Next.js, Express.js, MongoDB, PostgreSQL, Prisma, Tailwind CSS, Node.js, Mongoose, Hono

**Relevant Coursework:** Object-Oriented Programming, Operating Systems, Data Structures and Algorithms

## ACHIEVEMENTS

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- Solved **200+** problems on **Leetcode**.
- Solved **100+** problems on **Codeforces** - Competitive Programming Platform.
- Ranked among the **Top 10** participants in Alphathon'2023 by WorldQuant India.
- Secured a position in the **top 1%** of 1 million students in JEE Advanced 2022.

## LEADERSHIP POSITION

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**Event Coordinator:** at Animation and Game Designing Club. Led a workshop on "Animating with Blender", training over 500 freshers in the basics of animation.

**Club Member:** Cyber Labs - Tech Society of IIT Dhanbad

**Volunteer:** Conetto'23 (Tech-Fest), Srijan'23 (Cultural-Fest), Parakram'24 (Sports Fest)

**Organiser:** Srijan'24 (Cultural-Fest), Parakram'24 (Sports Fest)

**Sports Engagements:** Football (Played in College Team), Badminton