



**BORUDE HARSH PRAKASH | 22MI10022**  
**MINING ENGINEERING (B.Tech 4Y)**

### EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2026	B.Tech. (4Y)	IIT Kharagpur	7.33/ 10.00
2021	HSC (Class 12)	Laxmanrao Apte Prashala	87.00 %
2019	ICSE (Class 10)	Colonel Parab's School	92.00 %

### PROJECTS

#### Personal Portfolio Website | Frontend Project

Built a personal portfolio website using **React.js**, incorporating reusable components and custom CSS for a responsive, modern UI.

- Integrated **interactive particle effects**, **typewriter animations**, and **3D avatar tilts** for enhanced user engagement
- Connected portfolio to GitHub, LinkedIn, Instagram, and Twitter, showcasing **real-time GitHub stats** and LeetCode performance.
- Applied SEO best practices with **meta tags**, structured data, and accessibility features to improve discoverability and inclusivity.
- Implemented unit tests with **React Testing Library** and optimized scroll behavior and route transitions for better user experience.

#### Chess Website | Backend & Real-Time Project

Developed a responsive **chess game** with real-time gameplay using **Node.js**, **Socket.io**, **EJS**, and **Express.js**.

- Implemented **Chess.js** to handle rules, validate moves, and detect game states like check, mate, or stalemate.
- Enabled **real-time multiplayer gameplay** and chat using **Socket.io**, syncing board updates and player moves across devices.
- Ensured smooth user interactions with **drag-and-drop move functionality** and real-time game state synchronization.

#### Stock Price Analysis | Quant Club | IIT Kharagpur

(Oct' 23 - Jan' 24)

Applied trading strategies to historical stock data utilizing the open-source Python framework, **Backtrader**.

- Extracted the minute-by-minute data of Bitcoin using **Binance API** and implemented the **RSI** strategy by optimizing parameters
- Implemented Mean Reversion Strategy using **Bollinger Bands** and **ADX** for trend signals, yielding approximately **35% profit**

### AWARDS AND ACHIEVEMENTS

- Secured an All India Rank in **JEE Advanced, 2022** among **2 Lakh** qualified candidates conducted by **Government of India**
- Secured **99%ile** in **JEE Main, 2022** among **10 Lakh** qualified candidates conducted by **National Testing Agency**
- Secured **2nd position** in **Open-IIT Case Study** competition conducted by the **Technology Students' Gymkhana** in 2023
- Recipient of **Best Fresher 2023-24** award among 300 peers in Rajendra Prasad Hall of Residence.

### POSITIONS OF RESPONSIBILITY

#### Student Member | Students' Alumni Cell | IIT Kharagpur

(Nov' 23 - May' 24)

Worked on 3 major fronts: **Sponsorship**, **Event Management** and **Networking** to ensure smooth working of **Students' Alumni Cell**

- Organized IIT Kharagpur's flagship event - **20th Annual Alumni Meet**, consisting of **15+ events** with **700+ participating Alumni**
- Compiled, designed, and published the comprehensive '**Institute Yearbook**' for **2600** degree recipients of the batch of 2024.
- Edited and maintained the Alumni blog with a reach of over **1M** viewers and participation from over **500** alumni

#### Technology Events Secretary| Rajendra Prasad Hall Association| IIT Kharagpur

(Oct' 22 - Apr' 24)

Worked under the Warden to assist **Rajendra Prasad Hall Association** in **General Championship Technology**

- Responsible for managing Technology Events, and 20 team captains for the **General Championship Technology** in 2023
- Organized introductory workshops on Supply Chain, Software Development, Data Analytics, and Hardware Modeling for **900** boarders.
- Secured **4th** position in Technology General Championship competing against 23 other Halls of Residence in the year 2023..

### SKILLS AND EXPERTISE

**Programming Languages** : C++, C, Python, HTML, CSS | **Frameworks and Platforms** : Matplotlib, Numpy, AutoCad, MATLAB  
**Application Softwares** : Microsoft Office Package: Microsoft Excel, Adobe Photoshop, Adobe Illustrator, Adobe Express

### COURSEWORK INFORMATION

Programming and Data Structures\*, Probability and Statistics, Advanced Calculus, Linear Algebra-Numerical and Complex Analysis, Introduction to Innovation and Entrepreneurship, Basic Electronics\*, Electrical Technology, Mineral Economics and Business, Computational Methods and Mine Instrumentation,

\* Indicates lab component

### EXTRA CURRICULAR ACTIVITIES

- Selected from a pool of **1800** students for **Nation Sports Organisation(NSO) Football**.
- Conducted **Kshitij**, the techno-management fest of IIT Kharagpur as **Kshitij Campus Affiliate**.
- Vice-Captain of **Silver** winning team for **Illumination & Rangoli** for Rajendra Prasad Hall among 23 other Halls in 2024