# Prerna Madhyan

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## Education

## Indian Institute of Technology (ISM), Dhanbad

Bachelor of Technology in Mining Engineering (CGPA: 7.42 / 10)

Expected May 2025 Dhanbad, Jharkhand

## Experience

Leadseeder May 2024 – June 2024

Software Developer Intern

Remote

- Objective: To automated LinkedIn tasks, increasing networking efficiency by 40% and engagement by 30%
- Developed a LinkedIn automation tool that optimized networking for 500+ professionals, improving outreach
- Built a Chrome extension to import up to 200 users per session, including search results and group members
- Implemented a scheduler using Agenda.js to automate 100+ invitations/day, profile visits, and messaging sequences
- Tech Stack : Express.js, Node.js, MongoDB

## **Projects**

## Multithreaded Push-Updates System for Social Media Platform | Operating Systems

Self Project | Mar 2024

- Designed a multithreaded push-updates mechanism handling 10K+ actions and update feeds efficiently
- Developed data structures for wall, feed, & queues, to support updates for 37,700 users in a 289,003-edge graph
- Simulated realistic user activities with a user simulator thread and concurrency using 25 push-update and 10 read-post threads

## **Vibeln: Real-Time Chat Application** | React.js, Node.js, Socket.io, MongoDB

Self Project | Sept 2023

- Architected a scalable real-time messaging platform, with a dynamic user interface and bidirectional communication
- Engineered robust authentication workflows using JWT and integrated MongoDB for optimized data persistence and retrieval
- Achieved seamless real-time synchronization of messages and active chat states, ensuring ultra-low latency and uninterrupted communication

#### **Web3.0 Blockchain App** | React.is, Tailwind CSS, Metamask

Self Project | Jun 2023

- Created a decentralized Web 3.0 application facilitating secure Ethereum transactions on the blockchain network
- Deployed 2 Solidity smart contracts on Ethereum, enhancing security and efficiency of automated transactions
- Integrated MetaMask for secure Ethereum wallet pairing, and optimized code for a 30% efficiency improvement
- Integrated React.js and Tailwind CSS frontend with blockchain for 100% modern UI/UX and seamless experience

## **Technical Skills**

**Technologies**: HTML5, CSS3, React.js, Redux Toolkit, Express.js, Node.js, MongoDB, Postman, Bootstrap, Firebase **Tools**: Botpress, WebSocket, VS Code, Excel, Git, GitHub, Figma, Canva **Languages**: C, C++, JavaScript, Python **Concepts**: Data Structures and Algorithms, Operating Systems, Web Development, Object Oriented Programming

# **Achievements**

- Global Rank of 1469 in Leetcode Weekly Contest 411, competing against 32K participants
- CodeForces: Max Rating 1129 | CodeChef: Max Rating 1562 | LeetCode: 350+ Problems, Max Rating 1714
- Advanced to the second round Myntra WeForShe Hackathon, demonstrating strong skills and innovations
- Achieved a top 2.5% ranking in the JEE Mains 2021 examination, standing out among 1.2 million candidates

## Position of Responsibility

**Co-ordinator of ArtFreaks**: Headed the team of 50+ members, overseeing all activities, events, and logistics with oversight **Senior Member of Chassis Department, Mechismu**: at MECHISMU - a prestigious technical society of IIT (ISM) Dhanbad Participated in over five inter-college debate tournaments, enhancing public speaking skills and cultural connections