

## SKILLS

- ❖ Python
- ❖ C
- ❖ Flask
- ❖ HTML
- ❖ CSS, Javascript
- ❖ MySQL

## EDUCATION

- ❖ Btech in CSE' 2<sup>nd</sup> year | B.P. Poddar Institute of Management and Technology YGPA: 8.66
- ❖ XII (WBCHSE) | Habra High School (H.S.) 90.8%
- ❖ X (WBBSE) | Habra High School (H.S.) 92.14%

## EXPERIENCE

- ❖ Successfully collaborated in Smart India Hackathon 2024, contributing to the development of an innovative web application for carbon footprint analysis in Indian coal mines.
- ❖ Participated in numerous team-based projects and events, honing strong teamwork, communication, and coordination skills.
- ❖ Demonstrated adaptability and self-reliance by excelling in both team settings and individual problem-solving tasks.
- ❖ Proven ability to analyse complex challenges, develop creative solutions, and deliver results under deadlines.

## ACADEMIC PROJECTS

### ❖ Carbon Neutrality Web App for Indian Coal Mines

**Objective:** To develop a web application that enables Indian coal mines to quantify their carbon footprint and identify pathways toward carbon neutrality. This platform integrates real-time monitoring, advanced analytics, and life cycle assessment methodologies to support sustainability and energy efficiency.

#### Frameworks and Technologies Used:

- **Programming Languages:** Python, JavaScript
- **Backend Frameworks:** Flask, Node.js
- **Frontend Frameworks:** React.js/Angular
- **Data Visualization:** Tableau, D3.js, Chart.js
- **Database:** MySQL

#### Key Features:

- Real-time emission monitoring with IoT sensors
- Data visualization tools like heatmaps and advanced charts

- Methane capture analysis and afforestation recommendations
- Integration of AI and CPS (Cyber-Physical Systems) for emission optimization
- Per capita emission analysis and cleaning technology suggestions

#### ❖ Space Blog Web Application using Flask

**Objective:** Developed a Flask-based blogging platform to explore and share insights on space exploration, featuring dynamic content, user interaction, and a responsive design.

Technologies:

- **Frontend:** HTML, CSS, JavaScript
- **Backend:** Flask (Python)
- **Database:** SQLite/MySQL
- **Deployment:** Local server and Cloud-based options

**Key Features:**

- Create, edit, and manage blog posts with ease
- User-friendly and responsive interface for seamless browsing
- Dynamic content rendering with Flask templates and Jinja2
- Scalable backend architecture for smooth performance
- Potential for integration with advanced features like comment sections and multimedia support

## HOBBIES

- I am so much into music, so playing instruments like guitar, keyboard is my hobby.