Priyanshu Raj

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EXPERIENCE

Bharat Coking Coal Ltd, Dhanbad — Vocational Trainee

MAY 2023 - JUNE 2023

During the period of training I learned practically how drilling and blasting is done in Open Cast Mine, factors that affect the performance of blasting, effective management of machineries for transportation of coal and overburden, precise time and manpower management for coal production. Besides these I learned how to make good and reliable connections for simplifying the workflow in the company.

MINE EXCURSION

- Visit to Jhanjra Underground Coal Mines- Eastern Coalfields Limited
 - Learnings: Mine plan, Machineries, Working in Continuous Miner area and ventilation.
- Visit to Surda Underground Metal (Copper) Mines-Hindustan Copper Limited
 - Learnings: Mine plan, Machineries, Working in Horizontal Cut and Fill with Room and Post Pillar Method and ventilation

PROJECTS

Proj Name — Analysis of Slope stability of Tailings Dam and prediction of FOS using ML algorithms

In the analysis of the slope stability of tailings dam -

- Factor of Safety (FOS) of various models with varying parameters of Tailings Dams were calculated using FLAC2D.
- This dataset of FOS and parameters were used in different Machine Learning Regression algorithms to draw patterns and study the variation of FOS through the varying parameters.
- Through the help of Regression algorithms, a linear equation is generated which predicts FOS of new models which depend on the same parameters.

This project was completed under the guidance of Prof Radhakanta Koner and PhD Scholar Kapoor Chand Jogson.



EDUCATION

Indian Institute of Technology (ISM), Dhanbad — B.Tech Mining Engineering

CGPA - 7.73 DEC 2021 - MAY 2025

School, ISL Jharia

12th - APRIL 2019 - APRIL 2020 - 89%

De Nobili C.M.R.I.

10th - APRIL 2017- APRIL 2018 - 87.8%

SKILLS

Strong: FLAC2D,

Intermediate: MS Excel, C, C++

Beginner: Python, Machine Learning

ACHIEVEMENTS

- Finalist of Inter IIT event POLARIS
- Brought sponsorship for Khanan'22

POSITIONS OF RESPONSIBILITY

- **Business Development Head at SME**
- Jasper HEC Member

EXTRACURRICULARS

- Concetto'22 Volunteer
- Khanan'22 Volunteer,