

## **Summary**

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### **Years of Experience**

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### **Office of Employment**

Wood Group Kenny  
Chennai, India

### **Industries**

- Oil and Gas
- Chemicals
- Downstream
- Mining
- Process

### **Types of Facilities**

- Manufacturing Facilities
- Process Plants
- Refinery Complex

### **Areas of Expertise**

- Process Modelling
- Process Simulations
- DCS based plant monitoring
- Troubleshooting parameters
- Process Plant operation activities
- Data Analytics

## **Professional Summary**

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Rudipta is a Graduate Engineer with experience in Plant Operations, Modelling & Data Analytics. She is currently working as a Graduate Engineer/Data Analyst and is responsible for the execution of data analysis for process optimization of coal washing plant using Python & ML Models. She is also familiar to modelling and simulation techniques. She has been involved in performing steady state simulations of process plants. She has experience in operational activities and handling shutdown and emergency scenarios of process plants.

## **Qualifications**

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### **Education**

Bachelor of Technology in Chemical Engineering, University Of Petroleum and Energy Studies, Dehradun, 2021

### **Software / Skills**

- OLGA
- Python
- Microsoft Suite: Excel, Word, PowerPoint, Visual Basic
- HTRI
- DWSiM
- SOLIDWORKS

### **Languages**

- English
- Hindi
- Assamese

## **Experience**

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### **Graduate Engineer (Wood)**

#### **South32, Australia, Dendrobium Coal Data Diagnostic**

- Providing data analytics and ML solutions to develop several models in Python to significantly improve the yield for historical data of a Metallurgical Coal Washery in Dendrobium.
- Performing data ingestion, data pre-processing and filtering of historical lab sample data, data visualization & statistical analysis of deviations.
- Analyzing process maps & diagrams for driving improvements, facilitating a mapping process to visualize and analyze process flow of the coal product.
- Goal is to develop an advisory system to provide operators with recommended setpoints in order to realize the yield improvement.

### **Graduate Engineer Trainee**

#### **Linde India Ltd, Air Separation Unit, Rourkela, India**

- Worked as a shift engineer, responsible for monitoring plant processes, optimizing the production according to the customers and analyzing plant data.
- Gained experience of working on Siemens based DCS system while monitoring plant operations.
- Acquired knowledge of various industry practices including PFDs, P&IDs, etc.
- Successfully carried out shutdown of one of the plants according to SOPs by actively participating in the planning committee and managing the coordination among the team members.

#### **Summer Intern**

##### **TechnipFMC, Noida, India**

- Analyzed and learned about the fundamentals of Heat Exchangers and Air Coolers, various types, TEMA standards and their specifications.
- Implemented concepts of pressure drop, fouling, baffle spacing, tube design, heat duty, effective area, overdesign, stream analysis, vibrational analysis etc while performing simulations on HTRI.
- Detailed case studies on HTRI analysis were done, analyzing the various inputs to be added and the results were compared to the manual calculations obtained from Kern's Method.

#### **Summer Intern**

##### **Numaligarh Refinery Ltd, Assam, India**

- Detailed understanding and learning of the processing units including Crude/Vacuum Distillation Unit, Hydrocracker Unit, Hydrogen Unit, Motor Spirit Plant.
- Detailed discussion of Process Instrumentation and Controls in the instrumentation workshops and detailed study and field visits of Captive Power Plant were conducted.

## **Professional History**

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- Wood (Present)
- Linde PLC (2021-2022)
- Technip FMC
- NRL
- Nocializer