

# SHIBU MEHER

MHR IIT Bhubaneswar ◊ Odisha, 751013  
(+91)8917529970 ◊ sm58@iitbbs.ac.in

## EDUCATION

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### Indian Institute of Technology Bhubaneswar

Final Year Undergraduate

School of Minerals, Metallurgical and Materials Engineering

Awarded Spark Summer Research Internship 2020

*July 2017 - Present*

Overall GPA: 8.93/10

### Council of Higher Secondary Education Odisha

Intermediate

Maa Samaleswari College of Science and Technology, Barpali, Odisha

*July 2015 - July 2017*

Percentage: 81.83%

### Board of Secondary Education Odisha

Metriculation

Government Boys' High School, Barpali, Odisha

*July 2014 - July 2015*

Percentage: 90%

Junior Red Cross (Best Cadet in District Level Camp , Attended State Level Camp)

National Cadet Corps (A Certificate, One Combined Annual Training Camp)

## TECHNICAL STRENGTHS

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### Computer Languages

Python, C/C++, MATLAB, Fortran, Shell

### Software & Tools

HTML/CSS/JavaScript, LaTeX, Excel, COMSOL, Metadise, LAMMPS,  
Quantum Espresso

### Operating Systems

Linux, Windows

### Python Packages

Atomic Simulation Environment, Numpy, Matplotlib, Scipy, Pandas,  
TensorFlow, Keras

## EXPERIENCE AND PROJECTS

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### IIT Bhubaneswar

*Project Assistant*

Jun 2020 – Sept 2020

- Worked on a consultancy project on “A Model-Based Decision Control and Support System for Accretion control to increase the production of Sponge Iron to the target annual capacity”.
- Checked the presence of chaos in the obtained data from the plant
- Making a strategy for prediction and control of quality of sponge iron (Still in progress as Bachelor Thesis Project)

### IIT Roorkee

*Spark 2020 Summer Research Intern*

May 2020-July 2020

- Worked on improving the efficiency of thermo-electric material (Zinc Oxide)
- Performed computational modeling of grain boundary segregation of impurities in Zinc Oxide

### TATA Long Product Limited, Joda

*Summer Research Intern*

May 2019-June 2019

- Worked on on-line dynamic quality and process control of rotary kilns to increase productivity and kiln life.

- Made an autoregressive model to predict the quality of sponge iron and predict the required input to have the desired quality
- Implemented nonlinear denoising algorithms to reduce the noise from chaotic time series taken from heavy noise environment
- Developed an expert system to take decision based on plant conditions
- Developed an application containing the nonlinear model and the expert decision-making system.
- Checked the performance of the application in the plant
- Received Certificate of Appreciation

### **Epilepsy Detection from EEG Signal**

July 2019-Dec 2019

- Extracted two features from horizontal visibility graph of EEG signal and classify it using different classifying algorithm to study the accuracy

## **RELEVANT COURSES**

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### **Core Courses**

Physical Metallurgy  
 Thermodynamics of Materials  
 Mechanical Metallurgy  
 Chemical Metallurgy  
 Iron and Steel Making  
 Modelling and Simulation of Materials  
 Material Characterization  
 Transport Phenomena and Kinetics  
 Phase Transformation  
 Electrical and Electronic Ceramics  
 Light Metals and Alloys  
 Polymer and Nano-composite

### **Other Courses**

Chaos in Dynamical System  
 Numerical Methods  
 Communication System  
 Engineering Mathematics  
 AI for Medical Diagnosis  
 TensorFlow for AI, ML and DL  
 Neural Network and Deep Learning  
 Control System and Technology  
 Satellite Communication Engineering  
 Programming and Data Structure  
 Introduction to Economics  
 International Business

## **EXTRA-CIRRICULAR**

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Second Prize at TATA Mind Rover Season 7

Second Position in BETic Innovation Challenge in Inter IIT Tech Meet

Received State Level Rajiv Gandhi Pratiba Puraskar 2013

Senior NCC Cadet (Attended one Combined Training Camp and Passed 'B' Certificate Exam)

## **PUBLICATIONS**

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Shibu Meher et al 2020 IOP Conf. Ser.: Mater. Sci. Eng. 872 012077

## **CONTACT**

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LinkedIn – <https://www.linkedin.com/in/shibu-meher-505947150/>

Website – <https://shibu778.github.io/shibumeher/>

Alternative Email – shibumeher5@gmail.com, shibumeher6@gmail.com

Alternative Mobile Number – 9556142413