SHIBU MEHER

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

EDUCATION

Indian Institute of Technology Bhubaneswar

July 2017 - Present Overall GPA: 8.93/10

Final Year Undergraduate

School of Minerals, Metallurgical and Materials Engineering

Awarded Spark Summer Research Internship 2020

July 2015 - July 2017 Percentage: 81.83%

Council of Higher Secondary Education Odisha Intermediate

Maa Samaleswari College of Science and Technology, Barpali, Odisha

July 2014 - July 2015

Percentage: 90%

Board of Secondary Education Odisha

Government Boys' High School, Barpali, Odisha

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

Computer Languages Python, C/C++, MATLAB, Fortran

Software & Tools HTML/CSS/JavaScript, LaTeX, Excel, COMSOL, Metadise, DLPOLY

EXPERIENCE AND PROJECTS

IIT Bhubaneswar

Jun 2020 – Sept 2020

Project Assistant

Metriculation

- · 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 chaos-based control strategy for prediction and control of quality of sponge iron (Still in progress as B. Tech Project)

HIT Roorkee May 2020-July 2020

Spark 2020 Summer Research Intern

- · 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

May 2019-June 2019

Summer Research Intern

- · Worked on on-line dynamic quality and process control of rotary kilns to increase productivity and kiln life.
- · Made a nonlinear 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-Present

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

RELEVANT COURSES

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

 ${\bf Engineering\ Mathematics}$

AI for Medical Diagnosis

Introduction to TensorFlow for AI, ML and DL

Neural Network and Deep Learning

Control System and Technology

Satellite Communication Engineering

Introduction to Programming and Data Structure

Introduction to Economics

International Business

EXTRA-CIRRUCULAR

Second Prize at TATA Mind Rover Season 7

Second Position in BETic Innovation Challenge in Inter IIT Tech Meet

Received State Level Rajiv Gandhi Prativa Puraskar 2013

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

PUBLICATIONS

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