Shreedhar **Sahoo**

Address BR Ambedkar Hall of Residence, IIT Kharagpur

Phone 9734522163

Email shreedhars@iitkgp.ac.in, shreedharsahoo226@gmail.com

Education

2019/07- Current **Indian Institute of Technology, Kharagpur**

PhD in Mechanical Engineering, under Prime Minister Research Fellows (*PMRF*) scheme

PhD title: Investigation of traction and slip at rail wheel contact using wheel tread temperature monitoring

2014/07- 2019/07 **Indian Institute of Technology, Kharagpur**

Dual Degree (B.Tech and M.Tech) in Mechanical engineering, CGPA: 9.26 /10

2012/06 -2014/06 **AP State Board Exam**, percentage: 96.3 %

2012/06 **Central Board of Secondary Education**, CGPA: 10 /10

Projects

2019 **M.tech Project**

Topic: Active control of functionally graded shells using piezo-electric fibre reinforced composite

- Established rules of mixture as a simple alternate to Mori-Tanaka method for modelling the functionally graded cylinders.
- Modal analysis and Force vibration response were obtained using Finite Element methods, (including both cylinder and piezo-electric fibre reinforced composite)

2018 **B.tech Project**

Topic: Personality trait prediction from tweeter data

- Feature vectors corresponding to each user were defined.
- A Support Vector Machine for five level classification was run, class wise accuracies and confusion matrices were evaluated.
- For the five-fold cross validation, a mean accuracy of 80.1 % was obtained.

Internships

2018/05- 2018/07 **Transenigma, Kolkata**

Automation in Motion Graphics, platform: Adobe After Effects, Adobe Extension Manager

- Information Retrieval model was established connecting the subjects to images from image data base.
- Animation presets were developed which accepted various color palettes and images, which are placed and cropped to fit the space.
- The final video was rendered for a short paragraph.

2017/05- 2017/07 **Transenigma, Kolkata**

Automation in modelling human prototype, platform: Autodesk Maya, language: Maya embedded language (*MEL*)

- The 3D coordinates obtained from front and side view outline data points of different limbs of human anatomy.
- All the different models of limbs were joined together and other needed parts were scale-fit to make the complete prototype.

Certifications

2015/05 **Software Training Workshop, Continuing Education Programme**

Object Oriented Programming and Algorithm Design in Java

Topics: Graphs, Trees, Linked lists, Stacks, Queues and Binary search trees.

2018/07 **OCA Java certification**, Score: 91%

Positions of Responsibilities

2018/05 **Student coordinator**

Course: Algorithms for Text Analytics, coordinator: Dr. Pawan Goyal

Course: Modelling Tools and Languages, coordinator: Dr. Rajendra Machavaram

Course Work

Courses under Mechanical engg. Dept.: Finite Element and Boundary Element methods, High Performance Scientific Computing, Railway Vehicle Dynamics, Dynamics, Kinematics of Machines, Vibration analysis, Mechanics of Solids, Fluid Mechanics, Applied Elasticity, Thermodynamics, Heat transfer.

Courses under Mathematics Dept.: Probability and Statistics, Transform Calculus, Partial differential equations.

Other Courses: Basic Electronics, Economics, Biology.