Mohit Harishchandra Deshmukh

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ACADEMIC DETAILS

COURSE	SPECIALIZATION	INSTITUTE	UNIVERSITY	CGPA on a scale of 10	YEAR
BE	Mechanical	BITS PILANI Hyderabad Campus	Birla Institute of Technology and Science	8.91	2017

TECHNICAL PROFICIENCY

Software skills	Creo, AutoCAD, ANSYS (FLUENT and Mechanical APDL),Advanced Excel
Programming skills	MATLAB, JAVA , Python

INTERNSHIP/WORK EXPERIENCE

1.Goa Shipyard Limited **May 2015 - Jul 2015**

The exposure to this organisation gave me basic idea of processes involved in manufacturing of war ships. In this organisation I completed a study based project on '*Connectivity Issues of Fibre Reinforced Plastic mast to Steel Hull*'.

2. Aditya Birla Group Corporate Business Excellence Pvt Ltd (Internship) **Jan 2017 – June 2017**

Projects:

1. Determination of Optimum Parameters for a Vertical Rolling Mill: Data for six month on hourly basis timestamps was used to train the neural networks in MATLAB. Multistart function from Global optimisation toolbox was applied on the neural networks. A desktop based application was developed to predict energy consumption and determine optimum parameters.
2. Detection and Diagnosis of Controllers: Process variable of a controller in fibre manufacturing was used as input to obtain the performance indices as defined in the literature. Spectral analysis was done to inspect the oscillations in the controller manually. The performance indices are compared to confirm the diagnosis of the controller.

3.Capgemini India Pvt Ltd (Full Time) **Aug 2017 – Till Present**

Project:

Development of an online recruitment management system using spring hibernate framework of JAVA.

PROJECTS

Fabrication of smart solar tracker **Oct 2015-Dec 2015**

This was a group project where we fabricated the smart solar tracker for increasing the solar intensity falling on a panel. I designed the Creo model and participated in machining of the parts.

Universal index for assessing greenness of buildings **Aug 2015 - Dec 2015**

The aim was to develop a universal greenness index using multi-criteria decision making. The life cycle parameters of the buildings were considered. The method used was analytical hierarchy process. MATLAB was used for computations. The project was completed with the development of a program to assess the buildings.

Review of research areas and applications of Shape Memory Alloys **Jan 2016 - May 2016**

This project was a review of research work in SMA. The martensitic transformations and their effect on shape memory were studied in elaboration. The applications of shape memory alloys in robotics were also the focus of study.

Numerical Modelling and Simulation of Radiation Heat transfer in an enclosure **Aug 2016 - Dec 2016**

This project aimed at reducing the computational cost of determination of optimum residence time of slabs in a walking beam type reheat furnace. Radiation heat transfer is considered for steady state heat transfer of slabs using CFD tool FLUENT. The absorption coefficient of the mixture of gases present in the furnace is computed using weighted sum grey gas model.

PUBLICATION DETAILS

Performance investigation on sustainable screw turbine using computational fluid dynamics for micro and Pico-hydro applications **Mar 2017**

Published in Proceedings of the National Conference on Sustainable Mechanical Engineering: Today and Beyond, at Tezpur University, India

Short Description: In this study, the performance of a uniformly pitched double start closed trough screw turbine is analysed for the fluid flow characteristics through variation of its operating conditions using sliding mesh method in computational fluid dynamics (CFD). The analysis gives the design of the screw turbine required for expected power output. The CFD tool used was FLUENT.

POSITION OF RESPONSIBILITY at BITS PILANI Hyderabad Campus **Aug 2016 - Dec 2016**

Teaching Assistant, Fluid Mechanics

ACHIEVEMENTS and AWARDS

Recipient of institute's Merit Cum Need Scholarship	**2013-2017**
Won the Creo based design competition at college Technical Festival	**2015**
Topper of the course Automotive Technology among 85 students	**2016**

Oracle Certified Associate Java SE 7 Programmer I	**2017**

EXTRA CURRICULAR ACTIVITIES	
My team was runner up in an eight ball pool tournament at college.	**2014**
Active member of the cultural activity club of Maharashtra	**2013-2016**