## AMIT PRADIP PHARANDE

M. Tech.-Mechanical Design Engineering A/P Ozarde (412803) Tal-Wai, Dist-Satara. Phone: +919766396983 Email: <u>amitpharande16@gmail.com</u> Date of Birth: 16/01/1995 Languages: English, Hindi, Marathi.



## **OBJECTIVE:**

Work in a company where I could apply my technical as well as soft skills to achieve the best output for the company and also to learn under working professional to gain knowledge and improvement of my skills.

Class	Institute	Year	% / CPI
Final Year M. Tech.	Walchand College of Engineering, Sangli	2020	8.05
First Year M. Tech.	Walchand College of Engineering, Sangli	2019	7.72
Final Year B. Tech.	Rajarambapu Istitute of Technology, Islampur	2016	7.88
Third Year B. Tech.	Rajarambapu Istitute of Technology, Islampur	2015	7.68
Second Year B. Tech.	Rajarambapu Istitute of Technology, Islampur	2014	7.65
First Year B. Tech.	Rajarambapu Istitute of Technology, Islampur	2013	8.10
HSC	Varana Vidyaniketan, Varana	2012	70.17
SSC	Dravid High School, Wai	2010	96.36

## ACADEMIC QUALIFICATION:

GATE Score: 48.98 (501), CET Score: 133

## SOFTWARE SKILLS:

- Software: 'CATIA V5', 'MATLAB 2017-b', 'AutoCAD 2007, 2019', 'ANSYS 4.5'
- Software languages: 'C', 'C++' and 'Java'

## **CURRICULAR ACTIVITIES:**

- Attended 7 days Workshop on 'Electro-Mechanical Systems' (2020).
- Attended 5 days Workshop of 'Finite Element Analysis' (2019).
- Attended 2 days Workshop of 'Research Methodology' under TEQIP-3 (2018).
- Attended 2 days Workshop of 'R.C. Aircraft Design' (2014).
- Participated in Paper Presentation, (Inter college event 2014).
- Industrial Training of 15 days in 'BIPSUN Engineering' Pune (2014).
- Industrial Training of 15 days in 'MUTHA Engineering' Satara (2013).
- Actively Participated in the 'Sangli Flood Relief Work' (2019).

## **PROJECTS AND SEMINARS:**

#### • F.Y. B. Tech Mini Project on 'Design of Zeer Refrigeration System'.

There are some regions in the world like African countries where people can't afford a conventional refrigerator. For them 'Zeer Refrigeration System' is highly economical and easy for storing daily food items. Zeer refrigeration means pot under pot refrigeration system. In this system, steel pot is fitted inside a conventional clay pot according to its size. Top portion of steel pot is perfectly insulated. Then sand and water mixture is added between the hollow spaces of two pots. Temperature drop up to 3 degrees Celsius has been obtained inside a steel pot.

## • T.Y. B. Tech Mini Project on 'Design of Air Conditioning System of Car'.

It was a sponsored project from 'John Deere' company. The main objective of this project was to design a non traditional air conditioning system for car. For that purpose vortex tube has been used. In vortex tube if high velocity air at the mid portion of the tube is passed, at one end of the tube hot air and at another end of the tube cold air is obtained. Model of vortex tube is prepared using **CATIA V5**.

## • Final Year B. Tech Mini Project on 'Design of Cold Storage Room'.

It was a sponsored project from 'Mamta milk dairy', Satara. From various milk products, their one of the main product was butter. For storing butter they were using another cold storage in Satara. For that they were paying one rupee per kg of butter per day and their production of butter was one tonne per day. In order to save money they wanted to design and build their own cold storage. Along with conventional vapour compression refrigeration cycle we designed optimum cold storage room for them.

## • F.Y. M. Tech Project on 'Design of Mango Harvesting Machine'.

Harvesting mangoes with conventional mango harvesting equipment causes many problems. Problems such as large weight, time consuming etc. There are farmers who have more than 500 mango trees in their farm. So it becomes necessary to design and develop a sophisticated mango harvesting machine. In this project literature review has been done, survey of farmers has been taken who have mango trees, and then analysis and modification with own ideas has been done. Model of this machine has been prepared using **CATIA V5**. Finite element analysis of this machine has been carried out using **ANSYS**.

# • S.Y. M. Tech Project on 'Dynamic Response Analysis of a Cantilever Beam type Structure Subjected to Base Excitation'.

This paper is related to cantilever beam type structure subjected to base excitation. The mathematical model of the cantilever beam under sinusoidal base excitation is prepared. Then governing differential equation and its solution for this system is obtained. Model of this cantilever beam system is prepared using **CATIA V5**. Dynamic response curves and mode shapes are obtained using **MATLAB**. The effect of internal and external damping on the dynamic response is analyzed. The effect of variation of beam dimensions as well as beam material on the dynamic response is analyzed. The dynamic response of the equivalent cantilever beam with fixed base and applied external excitation force is obtained and compared with the base excitation system.

#### ACHIEVEMENTS AND AWARDS:

- Won the best mini project award for 'Design of Zeer Refrigeration System' (F.Y. B. Tech mini project 2013).
- Winner of 'Contraption' (Inter college technical event 2014).
- Shortlisted for Inter Zonal chess competition (Sangli 2014).
- Winner of RIT CUP in Chess (2013).

#### **PAPER PUBLICATION:**

• A.P. Pharande, "Dynamic response analysis of a cantilever beam type structure subjected to base excitation", Journal of Emerging Technologies and Innovative Research (JETIR), volume 7, Issue 9 (2020).

#### **HOBBIES AND INTERESTS:**

• Playing Chess and Tennis, Reading Technical Books, Travelling and Trekking.