



# SHANTANU DHANANJAY PATIL

B.Tech. - Mechanical Engineering  
- MITAOE

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Alandi, Maharashtra, India - 412105



## BRIEF OVERVIEW / CAREER OBJECTIVE / SUMMARY

To secure a challenging position that will allow me to utilize my technical skills, theoretical skills, while making a significant contribution to the success of the company.

## KEY EXPERTISE / SKILLS

AutoCAD CATIA SolidWorks Fusion 360 Ansys COMSOL Cura Communication Skills Time Management  
Team Management Matlab Product Design Manufacturing Processes 3D Printing

## EDUCATION

### Savitribai Phule Pune University

2019 - 2023

B.Tech. - Mechanical Engineering - MITAOE | CGPA: 8.77 / 10.00

### DKTE'S Yashwantrao Chavan Polytechnic, Ichalkaranji-416115, Ichalkaranji

2020

Diploma | Diploma - Mechanical Engineering | MSBTE | Percentage: 90.21 / 100.00

### Jayprabha English Medium High School, Jaysingpur-416101, Jaysingpur

2017

10<sup>th</sup> | MSBSHSE | Percentage: 81.80 / 100.00

## INTERNSHIPS

### Suzlon Infrastructure Service Ltd.

June 2, 2022 - July 30, 2022

Business Analyst

#### Key Skills:

Data Visualization Business Planning Strategic Planning Business Analysis Strategy Business Development Data Analysis  
Analytics

Performance Monitoring & Improvement. Develop relationships with second line leadership to get the a view of on-the-ground situations and to ensure timely communication of key recommendations.

### Swift Enterprise Pvt.Ltd.

May 12, 2019 - June 21, 2019

Junior Design Engineer

#### Key Skills:

AutoCAD CATIA Time Management Teamwork Field Work Workflow Supervision Coordination Product Design

Various parts like Cylinder Head, Brake Drums of TATA, Nissan, Ashok Leyland, etc. are being Casted and Machined. Various Design are being done for Jigs and Fixtures.

## PROJECTS

### Design & Development of Automatic Agricultural Pesticide Sprinkling Robot

Oct. 18, 2021 - May 16, 2022

Mentor: Dr. Preetam Kalos | Team Size: 4

#### Key Skills:

Arduino UNO Programming Languages Design Strategy SolidWorks ANSYS Fusion 360 Rendering CATIA Leadership  
Technical Documentation Presentation Skills Material Selection Mechanisms Robotics Mechatronics Fabrication

Our system uses the Arduino as a Microcontroller along with the HC-05 Bluetooth module. By using this Bluetooth module we can easily communicate/control the system. Motor Driver Units are used in our system which can drive the motors so that the system can move. The farmer will give command from mobile app to the Microcontroller unit through Bluetooth module then the processing of the command takes place in Microcontroller unit after that the action will take place the driver units will control the motor so that the system can move and also the nozzle can spray the pesticide and in this way the Pesticide Sprinkling can takes place.

### Modification in Mini CNC Machine using Arduino

Jan. 29, 2021 - Sept. 27, 2021

Mentor: Prof. B.R.Patil | Team Size: 4

#### Key Skills:

CNC Machine Arduino UNO CNC Programming Design Leadership Teamwork Time Management  
Technical Documentation Presentation Skills

CNC machine for small applications like sketching 2D images, draw letters and laser engraver. Image is being converted into G-code in Inkscape Software and the instructed to the CNC Machine. With the help of Camotics Software interface full demonstration is Done.

## Design and Development of Two speed Gear Box for Agro Machinery

Aug. 27, 2019 - April 15, 2020

Mentor: Mr. Bharat A. Tare | Team Size: 5

### Key Skills:

Leadership AutoCAD Ansys SolidWorks CATIA Technical Documentation Data Representation Rendering Ergonomics  
Presentation Skills Gearbox

The tractors mounted Sprayers most commonly used in farm. The Sprayers may have boom 12 to 50 Ft. So fan require to rotate with high speed about 3000 to 5000 rpm. For Sprayers 18-25 HP tractor mounted machine but to tractor has maximum speed from 900 to 1000 rpm. So far increase the rpm required to use gear box which change the speed from 1000 to 5000 rpm we had designed Sliding mesh gear box made up of helical gear it consist of two shaft (two speed Gearbox).1st gear - Teeth's 10 & 50 (ratio 1:5) and 2nd gear - Teeth's 12 & 48 (ratio 1:4).

## PUBLICATIONS / RESEARCH / WHITE PAPERS

### DESIGN AND DEVELOPMENT OF TWO SPEED GEAR BOX FOR AGRO MACHINERY

May 2020

Paper Publication | International Research Journal Of Modernization In Engineering Technology And Science | Mentor: B. A. Tare

| No. of Authors: 5

### Key Skills:

Technical Documentation Presentation Skills Product Design Mechanisms SolidWorks CATIA Ansys Teamwork

## ACHIEVEMENTS

- Secured 2nd Rank in Paper Presentation Competition at National Level in year 2019 held at DKTE'S Yashwantrao Chavan Polytechnic, Ichalkaranji.
- Winner Up in Inter-College Sport [2018-19] Chess and KhoKho held at DKTE'S Yashwantrao Chavan Polytechnic, Ichalkaranji.
- Best Out going Student of DKTE'S Yashwantrao Chavan Polytechnic, Ichalkaranji.

## ASSESSMENTS / CERTIFICATIONS

### Programming Fundamentals using Python - Science Graduates - Foundation Program

Key Skills: Python Logic Programming

Infosys Springboard Certification Course

### Introduction to CAD

Key Skills: Fusion 360 Product Design 3D Modeling

Learn Fusion 360 by Autodesk design Academy

### Fundamentals of Digital Marketing

Key Skills: Digital Marketing Marketing Market Research Social Network Analysis

By Google Digital Unlocked Certification Course

### Six Sigma Yellow Belt Certification

Key Skills: Six Sigma Analytics

Conducted by Anexas Europe and getting trained as Yellow Belt by demonstrating adequate competence in application of Lean Six Sigma tools and techniques.

### Simulink Onramp

Key Skills: MATLAB Simulink

Conducted by MATLAB Mathworks Training Services

### Object Oriented Programming using Python

Key Skills: Python Programming Object-Oriented Programming

Infosys Springboard Certification Course

### Certificate of Publication

Key Skills: Paper Publishing Technical Documentation Presentation Skills

This is to be certify that author "Mr. Shantanu Dhananjay Patil" with paper ID "IRJMETS82542" has published a paper entitled "DESIGN AND DEVELOPMENT OF TWO SPEED GEAR BOX FOR AGRO MACHINERY" in International Research Journal Of Modernization In Engineering Technology And Science (IRJMETS), Volume 2, Issue 5, May 2020.

### Course on Computer Concepts (CCC)

Aggregate: 64.0 / 100.0

Key Skills: Computer Skills MS Office

## Overview of Data Visualization

**Key Skills:** Data Visualization Graphical Models Data Analysis Data Analytics Microsoft Excel Dashboard Tableau

## SEMINARS / TRAININGS / WORKSHOPS

### Multi Criteria Decision Making (MCDM) Methods

March 25, 2022 - March 26, 2022

**Institute Name:** MIT Academy of Engineering, Alandi, Pune.

**Key Skills:** Decision-Making Problem Formulation Feature Selection Critical Thinking Time Management Flow Analysis

### Fundamentals of CNC Programming & Manufacturing

July 31, 2020 - July 31, 2020

**Institute Name:** Sky Rider Institutions

**Key Skills:** CNC Machine CNC Programming CNC Operation Manufacturing Techniques Manufacturing Processes

### Limit, Fit, Tolerances and Fundamentals of GD & T

Feb. 10, 2020 - Feb. 11, 2020

**Institute Name:** V. M. Industries & Training Center

**Key Skills:** GD & T Limit Tolerances

### 3D Printing

Dec. 6, 2019 - Dec. 6, 2019

**Institute Name:** DKTE'S Yashwantrao Chavan Polytechnic, Ichalkaranji

**Key Skills:** 3D Printing 3D Modeling Cura Mechanisms Material Selection Additive Manufacturing Manufacturing Processes

### Entrepreneurship Awareness Camp

Sept. 19, 2019 - Sept. 21, 2019

**Institute Name:** Maharashtra Centre for Entrepreneurship Development(MCED)

**Key Skills:** Entrepreneurship Business Strategy Business Planning Business Analytics Marketing

## CO-CURRICULAR ACTIVITIES

- Conducting AutoCAD Classes
- Design and Drafting works of various parts for small scale industries
- MESA President and CR in Diploma Engineering

## EXTRA CURRICULAR ACTIVITIES

- Good Chess, Football and Kho-Kho player.

## PERSONAL INTERESTS / HOBBIES

- Swimming
- Drawing
- Cycling
- Listening Songs
- Photography

## WEB LINKS

- LinkedIn - <https://www.linkedin.com/in/shantanu-patil-02b067170>

## PERSONAL DETAILS

**Gender:** Male

**Marital Status:** Unmarried

**Current Address:** Sr. No. 110/3/2, Flat No. 302, Kale Colony Lane No. 3, Near Dehu Phata, Infront Of Deo Kripa Petrol Pump, Alandi, Pune-412105, Alandi, Maharashtra, India - 412105

**Emails:** shantanu.patil@mitaoe.ac.in , shantanup775@gmail.com

**Date of Birth:** Dec. 15, 2001

**Known Languages:** English, Marathi, Hindi

**Phone Number:** +91-8411917370

## REFERENCES

- Prof. B.A. Tare**  
(Vice Principal, DKTE'S Yashwantrao Chavan Polytechnic, Ichalkaranji)  
(+91-7774013833, bharat.btare@gmail.com)