

Dhruvil B Patel

+91-9978245218 | dhruvilpatel513@gmail.com | [LINKEDIN](#)

EDUCATION

Ahmedabad University
Bachelor of Technology, Mechanical Engineering

Gujarat, IN
August 2017 - May 2021

PROFESSIONAL EXPERIENCE

Viral Industries

Manufacturing Engineer

Ahmedabad, IN
September 2022 – Current

- Design and development of valve gearbox as per the requirements in a CAD software from the beginning to end. Also, performing mechanical analysis in a software.
- Assisting in data analysis and utilizing statistical tools to identify areas for process improvement.
- Participating in cross-functional teams to support process improvement initiatives.

Caterpillar Signs Pvt Ltd

SolidWorks Executive

Ahmedabad, IN
October 2021 – August 2022

- Creating and rendering product designs from the blueprints and customer's suggestions.
- Maintaining the entire operation's workflow and did necessary changes for more efficiency. Coached and trained 4 new hires during their on-boarding process and assisted with the initial project challenges.

Surya Industries

Manufacturing Intern

Ahmedabad, IN
November 2019 – February 2020

- Analysis of the whole Manufacturing Process and learn about production system very closely.
- Analyzed 3 years of Inventory data using advanced excel features like VLOOKUPS, Macros and Pivot Tables to forecast new Reorder level and EOQ in a group.

Jyoti CNC Automation Ltd

Industrial Intern

Rajkot, IN
May 2019 – August 2019

- Observed manufacturing processes from casting to painting to packing of CNC machines parts and other parts.
- Implemented random sampling method to evaluate final product quality to ensure high quality standards were met, as well as created and maintained SPC Quality charts.

SKILLS

- **Programming Languages:** C/C++, CSS, HTML, MATLAB, Python, Scilab
- **Software Tools:** Advance Excel, Arduino, AutoCAD, SolidWorks, Tableau
- **Core Competencies:** Continuous Process Improvement, Quality Management, Production and Operations Management, Design Development, Design Engineering, Manufacturing processes, Advance Excel.

PROJECTS

Feasibility Analysis of Bi-facial PV Module (Undergraduate Research Project, Manuscript no. ERX-102032.R1)

- Procured and analyzed meteorological and GHI data for the year 2020, and developed theoretical models to calculate bi-facial gain, power, and efficiency.
- Performed cost reduction analysis and calculated the lifetime CO2 savings by implementing bi-facial PV module for a particular site.

Centrifugal Pump Characteristics Experimental Setup

- Designed and developed a setup to find out the centrifugal pump characteristics by measuring pressure difference across the pipe joints and by varying water flow rate.

Financial Analysis of Two Automotive Manufacturing Companies (Case Study)

- Gathered latest 15 years data and did data cleaning. Performed hypothetical testing analysis with the help of t-tests and f-tests on different parameters like gross profit, net income, and total selling.

Fabric Drying Experimental Setup

- Designed and developed a setup such that different fabric samples can be analyzed by varying parameters like pressure difference, DBT, WBT, Air flow rate to find an empirical relation for drying period.

EXTRA CURRICULAR ACTIVITIES

- **Co-founder, American Society of Mechanical Engineer (ASME)** student chapter at Ahmedabad University; gathered memberships of 80+ students; collaborated with 3 schools; mentored Social Media outreach and Newsletter teams
- **Winner, Website Making Challenge 2021** by programming club at Ahmedabad University
- **Winner, Mechathon 2020** by Ingenium technical fest at Ahmedabad University
- **Certificate** in Mechanical Design at associate level from **Dassault Systems**