

DHRUVAL PATEL

Saint Louis, MO | +1 (331) 356-3429 | dhruvalpatel0312@gmail.com
<https://www.linkedin.com/in/dhruvalpatel03>

PROFESSIONAL SUMMARY

Dynamic Mechanical Engineer with 5+ years of experience in manufacturing, assembly and design operations. Proven track record of optimizing production processes and 3D modelling and simulation tasks to drive efficiency and cost savings. Skilled in project management, process improvement, and implementing lean principles to enhance operational performance.

EDUCATION

SAINT LOUIS UNIVERSITY

- Master's of Science in Mechanical Engineering
- Cumulative GPA: 3.50/4.0

Saint Louis, MO
August 2023 - May 2025

PARUL UNIVERSITY

- Bachelor's of Science in Mechanical Engineering
- GPA : 3.0/4.0

Vadodara, Gujarat
May 2016 - May 2019

PROFESSIONAL EXPERIENCE

UNISON CORPORATIONS

Junior Engineer

Vadodara, Gujarat
July 2019 – Feb 2022

- Created 3D models for physical prototypes using SolidWorks or Inventor software packages.
- Collaborated with departments such as Quality Control, Procurement, Maintenance, and Production Planning.
- Identified cost reduction opportunities via improved processes, materials utilization, and waste elimination.
- Create process documentation, assembly flow charts, and BOMs (Bills of Materials).
- Implemented Lean Manufacturing techniques like 5S, Kaizen, and Kanban.
- Implemented turbomachinery filed testing and performance evaluation.
- Reduced production lead time by managing and tracking inventory.
- Performed Manufacturing Processes (CNC machining, casting, injection molding, etc.)
- Integrated automated systems for monitoring project progress and resource allocation.
- Performed industrial automation machinery (PLC, sensors, Actuators).
- Built productive business relationships in collaboration with internal departments and external vendor partners regarding procurement needs of manufacturing materials and order fulfillment.

TURBO ENERGY LIMITED

Assembly Engineer

Vadodara, Gujarat
Feb 2022 – Feb 2023

- Specialized in Pneumatic, Electric, Hydraulic, turbomachinery, and Controls.
- Analyzed and resolved defects, equipment problems, or process bottlenecks.
- Managed workflows and inventory using ERP/MRP systems.
- Applied lean tools like 5S, DMAIC, Kaizen, and SOPs.
- Performed field testing and performance evaluation of large turbomachinery and robotics.
- Coordinated with vendors and manufacturing teams to resolve issues.
- Implemented 5S to overcome waste of motion and wait for the warehouse. Managing and tracking inventory to reduce the production lead time of the order.
- Developed comprehensive layouts and schematics using Revit and AutoCAD.
- Facilitated the integration and automated system for monitoring project progress and resource allocation.
- Perform root cause analysis and implement corrective/preventive actions (CAPA).

SAINT LOUIS UNIVERSITY

Teaching Assistantship

Jan 2025 – May 2025

- Evaluated student learning styles and comprehension to enhance teaching strategies using LabView.
- Assisted in delivering lab sessions and tutorials focused on graphical programming using NI LabVIEW, including data acquisition, signal processing, and control system simulations.

TECHNICAL SKILLS

Analytical Tools: CAD Design & 3D Modeling (e.g., SolidWorks, AutoCAD, CATIA, Siemens NX.), PTC CREO parametric, Finite element analysis (FEA), Manufacturing automation, Microsoft office (Word, Excel, PowerPoint).

Data Visualization: Minitab, Microsoft project, SQL, SAP, Six sigma, Tableau, MATLAB, Control Systems & Mechatronics, Product Lifecycle Management (PLM), Mechatronics, Mechatronics.