

VAIBHAV SHINDE

Mechanical Design Engineer- CAD

Uttamnagar, Pune – 411023 | 7020504136 | vaibhavts2005@gmail.com | linkedin.com/in/vaibhav.shinde

CAREER OBJECTIVE

Mechanical Engineering Graduate with internship experience in Design and Quality. Skilled in SolidWorks, CATIA V5, and AutoCAD for 3D/2D CAD modelling, drawing reading, and GD&T-based engineering drawings, with working knowledge of basics of plastics. Experienced in following quality check processes and meeting delivery targets, with a strong interest in automotive parts design and product development.

EDUCATION

B.E. in Mechanical Engineering | PES Modern College of Engineering, Pune

2022 – 2026

CGPA-7.58

HSC (XII) | Modern College, Pune

July 2022

Percent-76.83%

INTERNSHIP EXPERIENCE

Engineering Intern | U R Rao Satellite Centre (URSC) – ISRO, Bengaluru

2025

- ❖ Studied spacecraft structural design, materials (CFRP composites, isotropic alloys, honeycomb panels), and launch load environments.
- ❖ Learned FE Analysis approaches for stiffness (modal) and strength (static, random vibration, acoustic) evaluation of spacecraft structures.
- ❖ Assisted in design study of thruster mounting brackets and gained exposure to composite structure manufacturing processes.
- ❖ Observed static and dynamic structural testing (vibration and acoustic testing) and correlation with FEA predictions.
- ❖ Studied GSAT-11 as a case study covering mass budgeting, structural configuration, and free-vibration analysis.
- ❖ Prepared technical reports and engineering documentation while working alongside a cross-functional project team.

Quality & Design Intern | Mechaniser Engineers- Pune

2024

- ❖ Designed and modelled mechanical components including bushes and shafts using SolidWorks and AutoCAD
- ❖ Supported quality checks and inspection of manufactured components to ensure conformity with design specifications and tolerances
- ❖ Created detailed 2D engineering drawings with GD&T annotations (tolerances, surface finish, fits) to ensure
- ❖ Coordinated with the tool room team to track project timelines and ensure tasks were completed accurately and on schedule
- ❖ Documented inspection results and design revisions to maintain accurate project records
- ❖ Collaborated with cross-functional team members, contributing to smooth communication between design and production stages

ACADEMIC PROJECT

Optimization of 3D Printing Filament using Composite Materials, PES Modern College 2025–26

- ❖ Developed composite-based 3D printing filaments by incorporating reinforcement materials (fibres, particulates) into a polymer matrix.
- ❖ Adjusted material proportions to find compositions with improved mechanical and thermal characteristics.
- ❖ Tested mechanical properties — tensile, flexural, impact strength, and hardness — using standard testing methods.
- ❖ Documented design iterations, test results, and material specifications throughout the project.

SKILLS

- ❖ **CAD & Design Tools:** SolidWorks, CATIA V5, AutoCAD
- ❖ **Engineering:** GD&T, Fits & Tolerances, Tolerance Stack-up, DFM, Basics of Plastics, Casting, Forging, Machining
- ❖ **Mechanical Design:** Component & Assembly Design, Manufacturing Drawings, Drawing Reading, BOM, Revision Control
- ❖ **Software:** MS Office
- ❖ **Process & Quality:** Following Defined Design Methodology, Quality Check Process, Meeting Delivery Targets, Process Compliance
- ❖ **Professional:** Technical Documentation, Problem-Solving, Team Coordination, Clarifying Requirements with Leads
- ❖ **Domain:** Automotive Parts Design, Industrial Component Design, Product Development