Ashish Kudu

Mechanical Engineering Graduate | Design & Manufacturing | CAD & Product Development
864-765-4450 | kuduashish9647@gmail.com

Education

Clemson University — Clemson, SC
Master of Science in Mechanical Engineering — *Aug. 2025 – May 2027*

University of Mumbai — Mumbai, IN
Bachelors of Engineering in Mechanical Engineering — *Aug. 2018 – May 2021*

Technical Skills

Design & Analysis: GD&T, DFM/DFA, Tolerance Stack-Up, FEA, Design Optimization.
CAD Tools: SolidWorks (Certified), AutoCAD (Certified), Inventor.
Computational & Tools: MATLAB, Minitab, Excel.
Manufacturing & Testing: Prototyping, Material Selection, Performance Evaluation, Field Testing.

Experience

Mechanical JR. Design Engineer — Jan 2025 – June 2025
Synergy Water Park Rides Pvt. Ltd. — *Mumbai, India*

- Designed and developed 15+ mechanical components and assemblies using SolidWorks and AutoCAD, improving design turnaround time by 20% while ensuring manufacturability and reducing production cost
- Collaborated with a team of 6 engineers to implement lean layout changes, reducing assembly time by 15% and improving material flow efficiency
- Conducted performance analysis on 10+ design iterations, improving component durability by 15% through design optimization
- Participated in cross-functional design reviews with 5+ stakeholders, ensuring 100% compliance with manufacturing and quality standards

Diagnostic and Maintenance intern — Aug. 2021 – Dec. 2021
Ashok Leyland — *Mumbai, India*

- Assisted in diagnosing 25+ mechanical failures in commercial vehicles, improving troubleshooting efficiency by 20%
- Performed maintenance on 50+ heavy vehicles (HMV, MCV, HCV), ensuring operational reliability and reduced downtime
- Utilized OEM diagnostic tools and service manuals to improve repair accuracy and maintenance efficiency
- Applied preventive maintenance schedules to reduce breakdowns by 15% and improve vehicle reliability
- Coordinated with 5+ technicians to ensure proper torque, alignment, and assembly practices, improving service quality

Engineering Intern — Dec 2022 – Jan 2023
Indian Railway — *Mumbai, India*

- Supported reliability assessment of 20+ mechanical systems, improving maintenance documentation accuracy
- Assisted in system inspections and technical reporting, contributing to a 10% improvement in operational efficiency
- Gained hands-on experience in mechanical systems maintenance, documentation, and safety compliance

Projects

Agricultural Utility Vehicle — Aug 2023 – May 2024

- Designed and fabricated a multipurpose agricultural vehicle with 3 modular attachments, reducing manual labor effort by 30%
- Completed end-to-end design including CAD modeling, material selection, and prototype fabrication within an 8-month timeline
- Conducted multiple field tests and performance evaluations, improving operational efficiency by 20%

Air Powered Car — Aug 2020 – May 2021

- Designed and fabricated a compressed-air-powered vehicle prototype achieving 100% zero-emission operation
- Conducted 10+ performance tests, analyzing efficiency and system behavior under varying loads
- Optimized pneumatic system efficiency by 15%, improving energy utilization and vehicle performance