

REVAN DADASAHEB KAKADE

MECHANICAL ENGINEER (SANDWICH)

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Mechanical Engineer specializing in centrifugal compressor design, aerodynamic analysis, and engineering automation. Proficient in CFD, FEA, CAD modeling, and developing custom software to optimize turbomachinery workflows. Experienced in cross-functional collaboration with a proven track record in aerospace design and product development.

EXPERIENCE

ACD R&D Trainee Engineer | Kirloskar Pneumatic Co. Ltd., Pune | Jan 2025 – July 2026

- Designed high-pressure centrifugal compressor impellers and executed fluid-thermal analysis using Ansys Fluent to optimize stage efficiency.
- Developed RADIGEN, a Python automation tool, significantly reducing manual calculations in the compressor design workflow.

Head of CAD/CAE & Manufacturing | Team Garudashwa (AISSMS COE) | 2024 – 2025

- Led a cross-functional team in the aerodynamic design and FEA structural validation of mission-specific aircraft components under dynamic loading.
 - Secured Global Rank 10 (Design Rank 4) at SAE International and AIR 3 at Cognizance IIT Roorkee.
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EDUCATION

B.E. Mechanical Engineering (Sandwich) | AISSMS College of Engineering (SPPU) | July 2026

CGPA: 8.29/10.0 (First Class with Distinction)

PROJECTS

RADIGEN (Radial Impeller Generation Tool)

- Developed a Python-based GUI tool for the baseline aerodynamic and thermodynamic design of centrifugal compressor impellers.
 - Automated fundamental fluid flow and sizing equations to streamline workflow processes and reduce reliance on expensive commercial software.
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SKILLS

Core Engineering: Thermodynamics, Heat Transfer, Fluid Mechanics, Strength of Materials, Machine Design

CAE & Simulation: Ansys (Workbench, Fluent), HyperMesh

CAD & Design: SolidWorks, AutoCAD, Autodesk Inventor, Solid Edge, Creo, Numeca (Axcent, Compal)

Programming: Python (Data Analysis, GUI Development, CSV)

Productivity & Documentation: Microsoft Office (Excel, Word, PowerPoint)

LANGUAGES

ENGLISH (PROFESSIONAL), HINDI (NATIVE), MARATHI (NATIVE), GERMAN (BEGINNER)