Shreyas R Shetty

Mob: +91 9741832128 | Email: shreyasr2837@gmail.com | LinkedIn: www.linkedin.com/in/shreyasshettyr

PERSONAL PROFILE

Mechanical Engineering graduate with experience in CAD design, FEA, CFD, and process automation. Proficient in SolidWorks, Ansys, CATIA, and AutoCAD, with hands-on experience in design validation and performance optimisation. Skilled in solving engineering problems and improving efficiency through data-driven approaches. Passionate about advancing these skills further and contribute to innovative engineering solutions for professional and organisational growth.

SKILLS

Tools: SolidWorks, Ansys Workbench, Ansys Mechanical APDL, Workbench, AutoCAD, CATIA, Autodesk Fusion 360, Python, Hypermesh, Microsoft Excel, Microsoft PowerPoint, Microsoft Word, Google Docs.

Technical Skills: Data Analysis, Prompt engineering, Excel-Python automation (PyQt5), Matplotlib.

Soft Skills: Leadership, Cross-Functional Collaboration, Time Management, Technical Reporting, Critical Thinking, Adaptability, Communication, Presentation, Decision-Making, Problem-Solving.

WORK EXPERIENCE

ProSIM R&D Pvt. Ltd., *Bengaluru, India* June 2023 – Dec 2024

Application Engineer

- **Designed and validated** 15+ crane assemblies (EOT, gantry) using **SolidWorks;** created manufacturing drawings in **AutoCAD, reducing rework by 25%.**
- **Performed static and modal FEA using Ansys (APDL, Workbench)** to validate structural components as per **IS, ASME, AERB** standards.
- **Automated engineering calculations** using **Python tools, reducing manual effort by 60%** and improving accuracy.
- **Developed** proposal automation tools, **cutting documentation time by 35%.**
- **Trained fellow Engineers** in automation workflows, **improving overall team productivity by 40%**.

BOSCH Ltd., *Bidadi, India* Sept 2022 – Oct 2022

Student Intern

- **Conducted root cause analysis** on KADIA honing machine failures in diesel injector barrel production, **increasing tool life by 50%**.
- Worked with Quality and Production teams to resolve tool jamming issues, **improving First Pass Yield by 20%, reducing scrap and rework costs.**
- Developed a **KANBAN tracking system** to monitor production, rejection rates, and failure trends.
- **Created SOPs** to standardise machine operation and improve safety compliance.
- **Collaborated with Quality and Production teams** to diagnose tool jamming and breakage issues, improving process reliability that **increased First Pass Yield by 20%, reducing scrap and rework costs.**

EDUCATION

Swansea University, *Swansea, Wales, United Kingdom* Jan 2025 – Jan 2026

Master of Science, Mechanical Engineering | ***Merit (67.17%)***

- **Modules**: Advanced Solid Mechanics, Advanced Thermo-Fluid Mechanics, Power Generation systems, Additive Manufacturing, Composites Materials, Metallurgy and Alloy Design, Simulation Based Product Design.
- **Designed and validated the front wing of the Formula Student car** using CAD and FEA (**SolidWorks, Ansys**) for Swansea University Race Engineering (SURE) team as part of the aerodynamics group developing **teamwork, time management, and leadership skills**.

Dissertation Description:

- Demonstrated **research ability, proficiency in design and simulation tools** and **case-based reasoning skills** through my dissertation entitled, "Effect of flow control devices on the performance of tidal turbine blades".
- **Conducted CFD analysis** on tidal turbine blade sections using Fluent (**SST k–ω model**).
- **Performed mesh independence study** and **validated simulations through wind tunnel experiments**.
- **Achieved 20% lift improvement** and **12% drag reduction** using optimised passive flow control devices.

Sapthagiri College of Engineering, *Bengaluru, India* Aug 2019 – June 2023

Bachelor of Engineering, Mechanical Engineering | ***First Class with Distinction (70.40% Overall)***

- Won second prize for the project '**Thrust Vector-Controlled Model Rocket Using Arduino**', demonstrating the potential of advanced control systems to enhance spacecraft safety, efficiency, and manoeuvrability.
- Built a thrust vector-controlled model rocket using Arduino, securing 2nd prize.
- Led a team of five for the project '**Metro safety gate valve using Fusion 360 and Python'**; published report at ICGCP conference, winning a **sponsorship of INR7000** from the State Government.
- Coordinated sports activities and participated in NSS community services.

LANGUAGES

- English – Fluent
- Hindi–Fluent
- Kannada – Native
- German – A2 level