

Shreyas R Shetty

+44 7554 466095 | shreyasr2837@gmail.com | linkedin.com/in/shreyasshettyr | Swansea, UK

Available from May/June 2026 | Eligible to work in the UK via the Graduate Route visa

PROFESSIONAL SUMMARY

Mechanical Engineer with an MSc from Swansea University (Merit) and 1.5+ years of industry experience in mechanical design, FEA, and process improvement. Hands-on across SolidWorks, AutoCAD, Ansys, and Python automation, with experience delivering structural, modal, thermal, and CFD simulations validated to ASME, IS, and AERB compliance standards. Combines technical depth with cross-functional collaboration, client-facing design reviews, and a continuous-improvement mindset shaped by prior shop-floor experience at Bosch.

SKILLS

CAD & Design: SolidWorks | AutoCAD (2D/3D) | CATIA V5 | Autodesk Fusion 360 | NX/UG (familiarity) | Teamcenter PLM (familiarity) | GD&T | Tolerance Stack-up | DFMA | DFM | DFR | BOM & ECN Generation

Simulation & Analysis: Ansys Mechanical APDL | Ansys Workbench | Ansys Fluent | HyperMesh | FEA (Static, Modal, Thermal, Fatigue, Nonlinear) | CFD | Stress Analysis | Welded & Bolted Joint Validation | Mesh Sensitivity | V&V

Manufacturing & Process: Lean Manufacturing | Continuous Improvement | 5 Whys | Ishikawa | 8D (familiarity) | Root Cause Analysis | KANBAN | Just-in-Time | SOP Development | First Pass Yield Improvement | Machining | Quality Control

Standards: ASME Y14.5M | ASME Standards | IS Standards | AERB (Nuclear) Standards | DFMEA | Risk Assessment | Compliance Reporting

Programming & Data: Python | PyQt5 | Matplotlib | NumPy | Pandas (familiarity) | Excel-Python Integration | MS Excel (advanced) | PowerPoint | MS Project (familiarity)

Soft Skills: Problem-Solving | Cross-Functional Collaboration | Design Reviews | Client & Stakeholder Communication | Mentoring | Time Management | Team Leadership | Adaptability | Working under Commercial Constraints

PROFESSIONAL EXPERIENCE

Application Engineer (Mechanical Design & Simulation) | ProSIM R&D Pvt. Ltd. June 2023 – Dec 2024

Bengaluru, India

- Designed mechanical components and assemblies for material handling equipment (EOT and gantry cranes) in SolidWorks; produced detail, assembly, and layout drawings with BOMs in AutoCAD, reducing design rework by **25%**.
- Performed FEA (static, modal, thermal, fatigue) in Ansys APDL and Workbench to validate welded joints, bolted connections, and structural members against ASME, IS, and AERB nuclear compliance standards.
- Led design reviews with cross-functional teams and clients; identified design risks, proposed corrective actions, and managed engineering change notices through to manufacturing handover.
- Developed Python (PyQt5) automation tools that reduced manual engineering calculations by **60%**; trained colleagues on usage, lifting team productivity by **40%**.

Manufacturing Engineering Intern | BOSCH Ltd.

Sept 2022 – Oct 2022

Bidadi, India

- Applied 5 Whys and Ishikawa root cause analysis on tooling failures of a honing machine producing diesel fuel injector barrels, increasing First Pass Yield by **20%** and extending tool life by **50%**.
- Implemented a KANBAN tracking system for production monitoring and authored Standard Operating Procedures (SOPs) for shop-floor machining operations.

EDUCATION

MSc Mechanical Engineering | Swansea University, Wales, UK | *Merit*

Jan 2025 – Jan 2026

- **Coursework:** DFMEA, Design for Reliability (DFR), Design for Manufacture & Assembly (DFMA), advanced FEA, fluid mechanics.
- **Dissertation:** CFD analysis of flow control devices on tidal turbine blades (Ansys Fluent, validated against wind tunnel testing) – **20% lift improvement, 12% drag reduction.**
- **Formula Student (SURE Team) – Aerodynamics:** Designed and validated the front wing of the race car using SolidWorks and Ansys; supported prototyping and assembly within a multidisciplinary team.

BEng Mechanical Engineering | Sapthagiri University, Bengaluru, India Aug 2019 – June 2023
First Class with Distinction

- **Team Lead, Final Year Project (5-person team):** “Metro Safety Gate Valve” – led design, prototyping, and Python-based rail-arrival prediction; published at ICGCP Conference; secured competitive State Government sponsorship.
- **Sports Society Coordinator:** Led selections, training, and event logistics for Kabaddi, Shot Put, and 1000m Sprint – developed organisation, and team leadership skills.

CERTIFICATIONS

- **SolidWorks: Basic to Industrial Level** – Coursera (Oct 2023)
- **SolidWorks: Design for Mechatronics** – LinkedIn Learning (Dec 2023)
- **AutoCAD – 2D and 3D CAD Design** – Udemy (Oct 2023)
- **Ansys Solutions (Mechanical APDL, FEA, CFD)** – Wissensquelle (June 2022)
- **Industrial Internet of Things (IIoT)** – Coursera (April 2023)
- **Digitalisation in the Aerospace Industry** – Coursera (Oct 2023)

REFERENCES

Available upon request.