VISWA M

viswamathanagopal@gmail.com | +91 6369905438
https://www.linkedin.com/in/viswa-m-91b544258/

Portfolio

PROFILE SUMMARY

Mechanical Engineer with expertise in product design, analysis, and automation, integrating mechanical engineering principles with computer science. Skilled in CAD tools and proficient in Python, C++ and MATLAB for simulation, automation, and computational analysis. Experienced in applying CFD and FEA visualization techniques, along with Python-powered automation for mechanical systems. Strong focus on precision, efficiency, and innovative problem-solving in collaborative engineering environments.

EDUCATION

Sri Krishna College of Technology, Coimbatore, India 2022 - 2026
B.E Mechanical Engineering (CGPA-7.50)

Alagar Public School (CBSE), Tuticorin, India 2021- 2022
12th (Percentage – 60.6 %)

Amrita Vidyalayam (CBSE), Ramnad, India 2019- 2020
10th (Percentage – 77.6 %)

SKILLS

- **Design Software**: AutoCAD, SolidWorks, Siemens NX, Catia, Creo
- **Analysis**: Ansys Workbench, Ansys APDL
- **Programming**: Python, C++
- **Core Areas**: Product Design, Simulation, CFD, FEA, Automation, GD&T, Validation, Optimization and Visualization
- **Soft Skills:** Problem-solving and Team collaboration, Adaptability & Quick Learning Time Management & Prioritization

PROFESSIONAL EXPERIENCE

- **Research and Development Intern** May 2025- May 2025
  Super Auto Forge Pvt. Ltd., Chennai, India
  - Assisted in forging stage design, die/tool development, and CAD modeling using Siemens NX.
  - Conducted material flow and defect prediction simulations in DEFORM & Simufact.
  - Gained practical exposure to cold/warm forging operations, billet preparation, phosphating, coating.
  - Optimized process parameters, cycle time, and documented process sheets for improved efficiency.

- **Student Intern** June 2024 – July 2024
  National Institute of Ocean Technology, Chennai, India
  - Trained in ANSYS Workbench for simulation of marine energy components.
  - Analyzed structural strength and efficiency of OTEC & LTTD systems, including flash chambers made from Structural Steel, Aluminum Alloy, and Grey Cast Iron.
  - Researched material performance optimization for sustainable ocean energy and freshwater production.

PROJECTS

- **Solar Dryer with Concave Fins and PCM Storage** January 2025 – March 2025
  Sri Krishna College of Technology, Coimbatore, India
  - Designed and developed a solar dryer with concave fins and PCM (Phase Change Material) storage, enhancing thermal performance and energy retention.
  - Implemented forced convection mechanisms, significantly improving drying rate and overall energy efficiency.
  - Evaluated system performance through testing and analysis, identifying optimizations to maximize efficiency, uniformity, and throughput.

PATENTS

- **Multi-Purpose Knife**
  (Design Patent -Granted) November 2023- January 2024
  Sri Krishna College of Technology

- **Modified Solar Dryer with concave fins and PCM in cylindrical storage** January 2025- March 2025
  (Utility Patent -Applied)
  Sri Krishna College of Technology

CERTIFICATIONS

- Advanced Machining Process – NPTEL
- Certified SolidWorks Associate - Dassault Systems
- 3d Model creation with Autodesk Fusion 360 -Autodesk
- Complete Course in Creo Parametric -Udemy
- Introduction to Solid Edge -Coursera
- Additive Manufacturing - University of Michigan (Coursera)
- Geometric Dimensioning and Tolerancing (GD&T)- Udemy
- Fundamentals of Materials Science-Shanghai Jiao Tong University (Coursera)

ORGANIZATIONS

ISHRAE (Indian Society of Heating, Refrigerating and Air Conditioning Engineers) June 2025 – Ongoing
Member- Sri Krishna College of Technology, Coimbatore, India

- Organized technical events, workshops, and knowledge-sharing sessions focused on HVAC&R technologies.
- Collaborated and networked with industry professionals, faculty, and peers to enhance learning exposure.
- Actively promoted energy-efficient and sustainable HVAC solutions through events and awareness activities.

LANGUAGES KNOWN

- English
- Tamil