

LOKESH RANGALA

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CAREER OBJECTIVE

To build a successful career in mechanical engineering by applying my knowledge in design, analysis, and manufacturing to develop innovative, efficient, and sustainable engineering solutions.

EDUCATION

Degree	Specialization	Institute	Year	CGPA
B.Tech	Mechanical Engineering	LBRC Mylavaram	2023-Present	8.2
Diploma	Mechanical Engineering	Sri Sivani College	2020-23	8.47
SSC		Ap Model School	2015-20	10.0

WORK EXPERIENCE

- **CAE Engineer Intern [Simulation Lab]** Apr-Jun 2025
 - Performed CFD simulations in ANSYS Fluent to analyze the thermal behavior of Water+7percent Cu nanofluid in Battery Thermal Management System (BTMS) for Electric Vehicles
 - Designed a thermal network with 7 Thermo Electric Coolers (TECs) to reduce maximum battery temperatures and maintain uniform heat distribution across 8 battery modules
- **Industrial Trainee (Automobile Service and Maintenance)** [Varun Motors Pvt.Ltd.] Jan-Jun 2023
 - Completed 6-month hands-on training in automobile servicing, repair, and maintenance operations
 - Learned practical skills in engine diagnostics, electrical systems and workshop tools handling

PROJECTS

- **Battery Thermal Management System (BTMS) using nano fluids for EVs** [Simulation Lab] Apr-Jun 2025
 - Conducted CFD analysis of Battery Thermal Management System (BTMS) for EVs using nanofluids (Water+Cu,CuO,Au,Al2O3) in Ansys Fluent under varying TEC stages
 - Analyzed cooling efficiency, thermal lag and temperature uniformity to identify optimal nanofluids for real-time EV operating conditions
- **Jet Engine Assembly Design in CATIA V5 | Core Propulsion Components** Jan-Feb 2025
 - Designed a Jet Engine Assembly in CATIA V5 focusing on the modeling and integration of key components like the Housing, Propeller and Shaft
 - Gained hands-on experience in 3D modeling, mechanical design and understanding of aerospace propulsion systems
- **A Comparison of Open Sun Drying and Mixed Mode Type Solar Drying Using Tomatoes** Nov-Dec 2022
 - Conducted an experiment to compare solar drying and open sun drying methods by analyzing temperature variation and moisture reduction in tomatoes
 - Found that mixed mode solar drying gave better product quality and hygiene by minimizing dust, pollution and ensuring controlled drying conditions

CERTIFICATIONS

- Completed five-day online short term course on Applied finite element analysis for structural and Bio-medical applications conducted by NIT Hamirpur
- Completed certification in Electric & Solar Vehicle Design and Development, conducted by AMZ Automotive
- Earned NPTEL certifications in Introduction to IoT and Introduction to Operating Systems
- Completed 6-week training in Unigraphics (NX) at CITD, Vijayawada

EXTRA-CURRICULAR ACHIEVEMENTS/ACTIVITIES

- Recipient of the North South Foundation Merit Scholarship for Academic Excellence
- Secured a position for project presentation at the Tech Fest during Diploma in Nov 2022
- Participated in Srujana and Yanthrora events as part of the college technical fest

TECHNICAL SKILLS

- **CAD Tools:** AutoCAD, CATIA V5, Siemens NX
- **CAE Tools:** Ansys Workbench, ANSYS Fluent, Static Structural, Hyper Mesh
- **Programming:** Python