



# SANKET KUMAR

Mechanical Engineering  
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Education	Institute	Year	CGPA
Class 12 <sup>th</sup>	APS Clement Town	2023	85%(percentage)
Graduation	NIT Srinagar	2023-2027	8.32(up to 4 <sup>th</sup> sem)

## OBJECTIVE

Mechanical Engineering undergraduate with skills in CAD, CAE, CAM, and AI/ML, seeking to apply and expand technical knowledge through industry-driven projects. Focused on learning, contributing, and adapting in fast-paced engineering environments.

## PROJECT

- Mechanical/CAD & Simulation Projects
  - **Surface Modeling of Fighter Jet Aircraft (*SolidWorks*)**  
Designed a complete 3D model using surface modeling tools to accurately replicate the aerodynamic shape of a modern fighter jet.
  - **Surface Modeling of Nissan GTR Sports Car (*SolidWorks*)**  
Created a high-fidelity surface model of the Nissan GTR, capturing complex curves and automotive design elements using advanced CAD techniques.
  - **3D Model of ABB Robotic Arm (*SolidWorks*)**  
Designed a functional robotic arm assembly with joint constraints and motion simulation for industrial automation purposes.
  - **Simulation of Various Fin Geometries (*Ansys*)**  
Performed thermal simulations to compare heat dissipation across different fin shapes and materials.
  - **Coupled Transient Thermal & Structural Analysis – Laser Cut (*Ansys Workbench*)**  
Analyzed the thermal load and resulting stress distributions during laser cutting over time.
  - **3D Design of Jet Engine (*SolidWorks*)**  
Modeled compressor blades, turbines, and combustion chamber in a full jet engine assembly.

- **Heat Simulation of Engine Components (*Ansys*)**  
Simulated heat transfer in components like piston, cylinder, and fins to evaluate thermal behavior under engine-like conditions.
- Data Analytics & ML Projects
  - **Sales Forecasting using Machine Learning (*Python, Scikit-learn*)**  
Built regression models to predict sales using historical data trends.
  - **Heart Disease Prediction (*Python, ML*)**  
Developed a classification model using medical data; achieved over 85% accuracy.
  - **Excel & Power BI Dashboards**  
Created dashboards for visualizing manufacturing data and performance indicators.

## SKILLS

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- CAD/CAM/CAE: SolidWorks, Siemens NX, Ansys (Thermal & Structural), ODYSSEE CAE
- Programming: Python, C language
- Simulation & Analysis: MATLAB, Transient Thermal & Structural Analysis
- Data Analytics & ML: Excel, Power BI, Pandas, Scikit-learn, Matplotlib
- Other Tools: MS Office, Git

### Technical Skills

Problem-Solving • Team Collaboration • Communication • Time Management • Attention to Detail • Adaptability • Analytical Thinking • Creativity

## EXPERIENCE

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### Sponsorship Lead

*Range Chinar (2025) &  
Techvaganza (2024)*

- Led sponsorship team for college cultural and technical fests; handled outreach and partner coordination.

### Team Leader

*Aakruti Innovation Competition, 2025*

- Guided a team in CAD modeling and design; managed workflow and project execution using SolidWorks.