

# JAYA VIJAY YEERUGULA

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## Professional Summary

Recent M.Tech graduate specializing in mechanical engineering and CAD/CAM technologies. Skilled in computational simulations, design optimization, and engineering analysis. Strong commitment to innovation, continuous learning, and delivering high-quality technical solutions.

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## Education

**M.Tech: CAD/CAM (Mechanical Engineering) 09/2025**

Raghu Engineering College (JNTU-GV) – Visakhapatnam, India

**B.Tech: (Mechanical Engineering) 08/2022**

Raghu Engineering College (JNTUK) – Visakhapatnam, India

**Intermediate: MPC, 2018**

Sri Chaitanya Junior College

**SSC 10th: 2016**

Bhashyam Public School

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## Skills

- AutoCAD
  - SOLIDWORKS
  - ANSYS Workbench
  - NX CAD
  - 3D Modeling
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## Experience

**Research Intern (10/2024 to 12/2024)**

Trinitech Infrastructure (India) Private Limited – Visakhapatnam

- Participated in technical meetings and reviewed engineering documentation.
- Developed engineering procedures and supported process improvements.

- Created engineering models and contributed to design standardization initiatives.
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## Projects

### **CFD-Based Battery Thermal Management System (M.Tech)**

- Developed liquid-based cooling system simulations using ANSYS Fluent.
- Designed cooling plates using zig-zag and serpentine patterns.
- Achieved  $\pm 2^{\circ}\text{C}$  temperature uniformity with improved cooling performance.
- Analyzed hybrid nanofluid performance for enhanced heat transfer.

### **Portable Vertical Axis Wind Turbine (B.Tech)**

- Designed 3D CAD models using SolidWorks for aerodynamic optimization.
  - Fabricated turbine components through 3D printing (Ultimaker Cura, Ender 3).
  - Developed functioning turbine capable of powering small electronic devices.
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## Strengths

- Adaptive
  - Time Management
  - Curiosity for Learning
  - Communication
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## Certifications

- AutoCAD – IGIT
  - ANSYS Workbench – Canter Cad
  - NX CAD
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## Declaration

I hereby declare that the above information is accurate to the best of my knowledge.

Date: [2025-12-31]

Location: Visakhapatnam