Vinayak M Holliyavarmath

+91 8431748285 - vholliyavarmath@gmail.com Bengaluru, Karnataka.



MECHANICAL ENGINEERING STUDENT | BRIDGING DESIGN, AUTOMATION & **EMERGING TECH**

Mechanical Engineering student focused on CAMD, FEA, and product development. Passionate about robotics, automation, and the integration of AI in engineering systems. Strong understanding of mechanical design principles with a growing interest in electrical automation components like motors, microcontrollers, and sensors. Eager to apply interdisciplinary skills in innovative engineering projects and real-world applications.

EDUCATION & CERTIFICATIONS

B. Tech - Mechanical Engineering

PES University - 2026

KLE Society's PRERANA RESIDENTIAL COLLEGE

XII, Science - 2022

KLE Society's School, Gadag

10th Standard - 2020

Industrial Pneumatics

PES University

Fundamentals of Digital Marketing

Google Digital Garage (Online), 2020

SKILLS

SOLIDWORKS HyperMesh **MATLAB** Solid Edge Canva Ansys

Python

ONGOING PROJECTS

Autonomous Swarm Drones for Light Show Applications

PES University Oct 2024 - Present

EXPERIENCE

Research Intern – Vertical Aerial Paint Spraying Mechanism for Drones

Mobile Autonomous and Robotics Lab, Centre for IoT, PES University

- Developed a vertical paint spraying mechanism for drones, including a custom-built 2-DOF pan-tilt gimbal system with motorized actuators for precise nozzle orientation and automated operation.
- · Integrated electrical and mechanical components, optimized paint coverage and payload balance, and contributed to testing and refinement to ensure stable, efficient aerial spraying performance.

CLUBS

Team Haya Off-Roading

Aug 2023 - April 2024

· Brakes and Wheel Assembly

Designed and analysed brake and wheel assembly for a solar car, enhancing efficiency and durability.

Developed optimised 3D models using SOLIDWORKS.

Performed static structural analysis in Ansys Workbench to validate the design.

Graphic Designer

Kannada Koota

Designing brochures and social media posts using Canva

Part of Marketing and PR

Oct 2023 - Present

EVENT PARTICIPATION

Electric Solar Vehicle Championship - 2025 Galgotias University, Noida

- Participated as part of Team Haya Off-Roading in a national-level solar vehicle competition.
- Contributed to technical design and cost optimisation, leading to multiple accolades:
 - Future Award Recognised for innovation and forward-thinking design.
 - Best Business Plan Awarded for strategic planning and cost-effective solutions.
 - Best Cost Report Acknowledged for accurate, efficient budgeting and reporting.