Harini R

9940444600 | harinir0806@gmail.com | linkedin.com/in/Harini Ramakrishna | 08/06/2005

EDUCATION

CEG Campus, Anna University	8.5 - CGPA	
Bachelor of Engineering in Mechanical Engineering	Oct 2022 – June 2026	
Shri Natesan Vidyasala MHSS	96%	
HSC - Higher Secondary Certificate	June 2020 – June 2022	

EXPERIENCE

Driver & DAQ Lead - CEG Motorsports (Electric ATV)   *April 2024 – Present*
- Lead the integration of **sensor-based DAQ systems** to capture roll, pitch, and load metrics, enabling data-driven validation and iterative enhancement of vehicle design.
- Worked as the **operations lead** in our sales presentation and the **senior vehicle dynamics** member.

Intern - TAFE   *June 2025 – July 2025*
- Studied tractor systems and mapped plant operations including logistics, QC, production, **SCADA** paint shop.
- Performed time study; analyzed plant-wide **CPM** and **PLT**; observed lean methods like Heijunka and Poka Yoke.

Intern - Hyundai Motors India Ltd.   *July 2024 – Aug 2024*
- Researched automobile **diesel exhaust systems**; observed **wheel balancing**, **wheel alignment**.
- Front End Member assembly palette **timing analysis**

Design Intern - Futaucon Tek Pvt. Ltd.   *June 2024 – July 2024*
- Tested Clickdraw — a **2D drafting copilot** for SolidWorks — with 50+ 3D model testcases under various conditions.
- Configured the settings for different International Organizational **Standards for dimensioning**.

Silambam Coach – Vaalarivan Silambam Association   *June 2021 – Present*
- Teaching for about **20** to **25** students and a Refree for District level competitions.
- Practicing silambam for about **8** years.

PROJECTS

Topology Optimization of Steering Knuckle | *Solidworks, Fusion, Ansys*   *July 2025 – Present*
- Performing the topology optimization of an ATV steering knuckle using generative design in Fusion; validate load-bearing performance through real-world sensor testing and FEA correlation.

Precision Grinding Wheel Fixture | *Arduino, Solidworks, AutoCAD, Ansys*   *April 2024 – July 2024*
- Fixture enables precise stepped rotation of the grinding wheel using a stepper motor to scan its 2D profile for research.

Pneumatic Height Sorter | *Arduino*   *March 2024 – May 2024*
- Low-cost pneumatic height sorter controlled by Arduino and IR sensors.

Self-Balancing Delivery Box (SBDB) | *Solidworks, Ansys, AutoCAD*   *Nov 2023 – March 2024*
- Designed a self-balancing box to transport food without linear or angular disruptions using a gyro mechanism.
- Achieved stabilization with deep groove ball bearings and polyurethane foam damping; later upgraded to eddy current damping.

ACHIEVEMENTS

AIR 12 in eBAJA 2025	SAE INDIA – CEG Motorsports
AIR 1 in MegaATV 2025	Autosports – CEG Motorsports
2nd Runner up in Ideathon (Aesthetic design of a e-motorcycle)	Raptee.HV and ARAI
2nd in Project Display (SBDB)	Dept. of Manufacturing Eng., AU – CTF Projects
2nd in Variety Show	Kilpauk Medical College – CEG Spartanz
State (2), District (5) and Zonal (3) Level Medalist - Silambam	Vaalarivan Silambam Association

COURSES AND WORKSHOPS

3D Modelling - Solidworks	AUFRG, Anna University
French A1/A2 Level	School of French
IC Engine Workshop	Society of Mechanical Engineering, Anna University
EV Workshop	Electrical and Electronics Engineering Department, Anna University
Engineering behind Mahindra XUV 3XO Walkaround Workshop	Motor Vikatan & MRV

SKILLS

Solidworks, Catia V5, Creo, AutoCAD	Design
Fusion, Altair Motionview, Lotus, Hypermesh, Ansys	Analysis
PPT, Excel, Word	Data Handling
Plant Layout, Time study analysis, Inspection methods	Production
Python, C++	Programming Languages