# **DEEPAK**

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# **SUMMARY**

Enthusiastic Mechatronics Engineering student with hands-on experience in automation, industrial machinery, and system integration. Well-versed in PLC, SCADA, and HMI technologies, gained through practical internships and project work. Skilled in diagnosing issues, preparing clear technical documentation, and communicating effectively with diverse teams. Driven by curiosity and a passion for blending mechanical, electrical, and software elements to create efficient, reliable, and innovative engineering solutions.

# TECHNICAL SKILLS

Programming Languages: Python, C++, Java

Tools & Software: ABB RobotStudio, CoppeliaSim (V-REP), Arduino IDE, SOLIDWORKS, AutoCAD, FANUC ROBOGUIDE, Tinkercad,

FluidSIM-H, FluidSIM-P

Other Skills: Quality Assurance, CNC Part Programming, CAD drawing

## **PROJECTS**

## Design and Fabrication of IoT-Based Smart Seeding and Spraying Robot

IoT, Embedded Systems, CAD

NodeMCU, Blynk, SOLIDWORKS, DC Motors

- · IoT Control: Used NodeMCU and Blynk app to wirelessly control the rover through a smartphone.
- · Motor & Circuit Design: Each wheel has its own DC motor controlled by relays, powered via battery or direct supply.
- Mechanical Design: Built and modeled the rover using SOLIDWORKS, including integrated seed and spray systems.

#### Full Stack Development with GUVI - BookMyShow Clone

Web Development Project

MongoDB Atlas, Node.js, Express.js

- Managed data and handled queries efficiently in MongoDB Atlas.
- · Developed APIs with request validation and error handling for a seamless user experience.

# PROFESSIONAL EXPERIENCE

**Harsha CNC** 

Coimbatore, India

Manufacturing / Core

10 Jul. 2024 - 20 Jul. 2024

- Contributed to LATHE, CNC, and VMC operations, ensuring high product quality through precise measurement and inspection techniques.
- Led efforts to improve production efficiency by resolving quality discrepancies, reducing rework rates, and enhancing product consistency.
- Used precision measurement tools such as calipers and micrometers to ensure compliance with dimensional specifications and engineering standards.

**Thalir Automations** 

Coimbatore, India

Assembly Assistant - Manufacturing / Core

18 May 2025 - 31 May 2025

- Completed a 3-week internship focused on Special Purpose Machineries (SPM).
- Acquired practical experience by exploring various departments such as Assembly, Electrical, Machine Shop, Quality Assurance, and Fabrication.
- Assisted in industrial projects involving manufacturing and troubleshooting of machines such as Tap Body Assembly, Bending Machine, Tip Flaring, Riveting, and Dry Leakage Testing Machines.

## Siemens Centre of Excellence (SCoE), MIT Campus

Chennai, India

Summer Intern - Industrial Automation

02 June 2025 - 27 June 2025

 Completed a 4-week intensive internship focused on industrial automation technologies including PLC, SCADA, and HMI using Siemens WinCC.

- Acquired practical experience with PLC fundamentals, ladder diagram programming, analog/digital I/O modules, timers, counters, and real-time control logic.
- Designed and interfaced HMI systems with Siemens S7-1200 PLC, implemented SCADA solutions via WinCC, configured OPC servers, and deployed PID-based temperature regulation using TIA Portal.

# **EDUCATION**

Sri Krishna College of Engineering and Technology2023 - PresentB.E. in Mechatronics EngineeringCGPA: 7.4AVP Trust National Matric Higher Secondary School2021 - 2022+2 (HSC)Percentage: 90.3AVP Trust National Matric Higher Secondary School2019 - 202010th (SSLC)Percentage: 83

## CERTIFICATIONS

- Skill Development Programme on Mastering Collaborative Robots
- Learn with GUVI Season II One Week App Development Challenge
- Fusion 360: Design for Mechatronics LinkedIn Learning