SUDHANVA K UPADHYA

RESUME

CONTACT

+91 9113995343

sudhanvaupadhya108@gmail.com

Udupi, Karnataka -574113

sudhanva-portfolio.pages.dev

linkedin.com/sudhanva-k-upadhya

PROFILE SUMMARY

4th-year B.Tech Robotics and AI student, passionate about building intelligent and efficient robotic and AI systems. I enjoy turning theoretical concepts into real-world solutions. With interests in coding, robotics, and AI, I focus on creating solutions that are not just functional, but optimized, reliable, and impactful.

SKILLS

Programming Languages :

- C
- C++
- Java
- Python
- PLC
- CNC G-code

Software :

- ROS2
- CATIA
- KICAD
- MATLAB
- Arduino IDE
- WPLSOFT
- ABB RobotStudio
- Isaac Sim (Learning)
- NI-LabVIEW
- Fusion 360

Key Strengths:

- Strong communication
- Interpersonal skills
- Strong problem-solving skills
- Self-motivated and proactive
- Ability to work independently and in teams

LANGUAGES

- English (Fluent)
- Kannada (Fluent)
- Hindi (Conversational)
- German (Beginner)
- Japanese (Beginner)

EDUCATION

SESHADRIPURAM COLLEGE 2021 - 2022

- Completed PU in PCMC with 83.66%.

N.M.A.M.INSTITUTE OF TECHNOLOGY 2023 - 2027 (expected)

- B.Tech in Robotics & AI Engineering, 4th year (7th semester) with 8.44 CGPA.
- Minor Degree Course in Internet of Things.

PROJECTS

- **CareNav (Major Project, in progress) :**

  Developing a robot for hospital assistance application which uses a robotic arm and a mobile robot.

- **6-DOF Robot Arm :**

  Created a working 6-DOF robot arm and custom software for robot arm control with record and playback functionality.

- **Robot Arm Simulation:**

  Made a robot arm simulation for both serial and parallel robot arm with standard controls.
  Website Link: arm-sim.pages.dev

- **Robot Arm Simulation with DH-Parameters:**

  Made a robot arm simulation with A real-time 3D robot arm simulator with editable parameter, kinematics, transformation matrix.

- **CNC Pen Plotter :**

  Designed and created a working CNC pen plotter using Arduino and CNC shield

- **Mecanum Wheel Robot :**

  Developed a mecanum wheel mobile robot using Arduino and OpenCV with ESP32 that can navigate to different ArUco markers.

- **Smart Differential Wheel Drive Mobile Robot :**

  Developed a mobile robot using Arduino and OpenCV with ESP32 that can park on its own using ArUco markers.

- **Smart Parking System:**

  Developed an IoT based smart parking system to monitor and manage parking space availability and display it using LCD for easy monitoring.

INTERNSHIP

- **InGO Electric :**

  Undergoing a 5-month internship involving product/prototype development and testing. My responsibilities include electrical system design, IoT integration, and embedded software development.

- **Experimind Labs PVT LTD :**

  Completed a 2-month internship involving work in CAD design, PCB development, and product testing. Contributed to the design and evaluation of hardware components and assisted in prototype development.

- **FABLAB :**

  Completed an internship focused on IoT, Virtual Reality (VR), and 3D Printing. Gained hands-on experience in rapid prototyping and digital fabrication tools.

REFERENCE

- **Dr. Muralidhara Rao**

  Professor and HoD of Robotics and AI
  Email: hodrai@nitte.edu.in
  Phone: +91 96863 83264

- **Dr. Tanya Mendez**

  Assistant Professor, Grade III
  Email: tanya.mendez@nitte.edu.in
  Phone: +91 9663866422

- **Dr. Ankitha Rao**

  Assistant Professor
  Email: ankitha.rao@nitte.edu.in
  Phone: +91 99202 15030