Muhammad Fayas NS

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Ⓤ Udemy

Profile

Aspiring 3D designer and robotics enthusiast with hands-on experience in designing and developing autonomous robotic systems. Skilled in 3D modeling, CAD, and realistic digital rendering using tools like Solid Edge, Fusion 360, AutoCAD, and Blender. Experienced in integrating electronics and sensors with robotics systems, and implementing AI-driven automation using ROS and machine learning. Passionate about creating functional, innovative designs while continuously exploring emerging technologies in 3D design, robotics, and AI-powered solutions.

Professional Experience

04/2025 – 10/2025 Coimbatore,india	**Reserch & Development - ROBOMIRACLE** Robotic Designer Worked as a Robotics Designer in the R&D department, contributing to the design and prototyping of robotic systems. Gained hands-on experience with industry-standard CAD and design tools including Fusion 360, AutoCAD, Blender, and Solid Edge. Developed foundational electronics knowledge to support the integration of hardware with robotic systems, while optimizing components for improved efficiency and real-world application performance

Education

06/2024 – 04/2025 Malappuram, India	**Diploma in Robotics & AI – LEARN LOGIC AI, Manjeri**
02/2025 Online, India	**3D Modeling & CAD** UDEMY ↗
08/2022 – 03/2024 Kollam, India	**VHSE in Junior Software Developer – VVHSS POREDOM**

Projects

KIKO– AI-Powered Study Companion Robot
- Designed an interactive AI-based study assistant to help students with learning.
- Integrated features like doubt clarification, topic assessments, and performance tracking.
- Applied machine learning and automation for a personalized learning experience

Obstacle-Avoiding Robot
- Designed and built an autonomous robot that detects and avoids obstacles using ultrasonic sensors.
- Implemented real-time decision-making for smooth navigation.

3 DOF Manipulator with Electromagnetic Gripper
- Designed a 3 DOF manipulator with an electromagnetic gripper, featuring pre-programmed pick-and-place functionality.
- Implemented smooth servo control and adjustable placement for object handling.

Autonomous Bluetooth-Controlled Robot
- Developed an autonomous Bluetooth-controlled robot,featuring six control modes (Forward, Backward, Left, Right, Stop, Autonomous) accessible via an Android application.
- Implemented obstacle avoidanceand path selection based on distance measurements.

5 DOF Manipulator with 3 finger gripper ⎘
- Developed an autonomous cotton-plucking robotic arm, detecting cotton using an Intel Depth Camera and sending coordinates to the controller for motor control.
- Implemented the system using ROS Jazzy, enabling precise and efficient robotic arm movement for autonomous cotton picking.

Nila bot
Designed and developed a new head structure with an integrated eye stand, improving the bot's aesthetic and functional appeal.

Nexus bot
Collaborated on the design and prototype phase, focusing on component placement and mobility mechanism.

Skills

Technical Skills
- Robotics & Automation
- 3D Modeling & CAD
- Rendering & Visualization
- Arduino Programming
- Hand on experience in senors
- AI & Machine Learning

Soft Skills
- Problem-solving
- Adaptability
- Communication
- Teamwork
- Time management
- Decision-Making

Language

- MALAYALAM
- ENGLISH
- TAMIL