



MOHAMMED ASAD ILIAS SHAIKH

ROBOTICS & AUTOMATION ENGINEER

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Entry-level Robotics and Automation Engineering graduate with hands-on project experience in autonomous navigation, robotic manipulation, and AI-driven computer vision.

PROJECTS

AUTOMATED FISH SORTING SYSTEM USING COMPUTER VISION & AI

Technologies: Python, OpenCV, CoppeliaSim, Raspberry Pi

- Co-developed an AI machine leveraging integrated real-time computer vision algorithms for completely automated, time-efficient aquaculture processing.
- Programmed custom object detection and classification scripts configured for localized deployment on an embedded Raspberry Pi platform.

LANGUAGE-GUIDED NAVIGATOR FOR AUTONOMOUS PATH PLANNING

Technologies: Python, Ollama, LangChain, CoppeliaSim

- Engineered an autonomous software agent that processes natural language instructions into execute-ready navigation paths within simulated robotics spaces.
- Integrated local Large Language Models via Ollama with CoppeliaSim to successfully map complex, multi-step natural human intent to direct robot operations.

SCARA ROBOTIC ARM MANIPULATOR FOR KINEMATICS & CONTROL

Technologies: Python, CoppeliaSim, Arduino Hardware

- Formulated and programmed the exact mathematical forward and inverse kinematics algorithms to achieve ultra-precise trajectories.
- Synchronized simulated kinematic path nodes smoothly with micro-controlled Arduino hardware systems to optimize pick-and-place precision.

HOTEL BOOKING MANAGEMENT FOR CLOUD SOFTWARE AUTOMATION

Technologies: Power Apps, Power Automate, SharePoint

- Designed and deployed responsive data portals containing automated multi-level database approvals and deep-linked email reminders.

WORK EXPERIENCE

NOVIGO SOLUTIONS (Jan 2026 – Apr 2026)

Power Apps Intern • Mangaluru, India

- Developed tailored business tools using Microsoft Power Apps and cloud environments to streamline operational processes.

OASIS INFOBYTE (Aug 2025 – Sept 2025)

Python Programming Intern • Remote

- Completed core software engineering debugging loops and handled algorithmic code modules.

EDUCATION

SAHYADRI COLLEGE OF ENGINEERING AND MANAGEMENT — Graduation: 2026 CGPA: 8.44

Bachelor of Engineering (B.E.) in Robotics and Automation Engineering • Mangaluru, India

ST ALOYSIUS PUC — Completed: 2022

Pre-University Education • Mangaluru, India

ABOUT ME

Passionate Robotics and Automation Engineering graduate with proven experience designing intelligent hardware systems, implementing autonomous navigation, and building AI-driven computer vision solutions. Adept at physical CAD design, kinematic simulation, and hardware-software integration.

TECHNICAL SKILLS

ROBOTICS & SIMULATION

CoppeliaSim, Gazebo, Kinematics, Path Planning

AI & COMPUTER VISION

OpenCV, LLM Integration (Ollama, LangChain)

CAD & HARDWARE

SolidWorks, Fusion 360, 3D Printing, Prototyping

EMBEDDED SYSTEMS

Python, Arduino, Raspberry Pi, Debugging

AUTOMATION

Microsoft Power Apps, Power Automate, SharePoint

LINKS

LinkedIn:

[linkedin.com/in/mohammed-asad-ilias-shaikh-98277b26a](https://www.linkedin.com/in/mohammed-asad-ilias-shaikh-98277b26a)

GrabCAD:

grabcad.com/mohammed.asad.ilias.shaikh-1

Portfolio:

[Asad Portfolio](#)

CERTIFICATIONS

- Automotive Industrial Engineering
- CASPRO Sheet Metal Design Mastery
- NPTEL Online Certification course on Robotics and Control: Theory and Practice
- Robotic Process Automation (RPA) course