

MILAN MANOJ

Ernakulam | 9605714412 | milanmanojp0@gmail.com | [Linkedin](#) | [Github](#) | [portfolio](#)

AI & Data Science Engineering student with strong hands-on experience in machine learning, computer vision and robot intelligent system, complemented by solid full-stack development expertise. Skilled in building scalable web applications, integrating AI models into production systems and developing robotic solutions. Proven leadership in technical projects and hackathons.

ACADEMIC QUALIFICATION

• Bachelor of Technology

Muthoot Institute of Technology and Science | AI & DS | CGPA 7.98

Expected July 2027

• Higher Secondary (Class 12)

Sacred Heart Higher Secondary | PERCENTAGE-95.6%

March 2023

• Secondary Education (Class 10)

Sacred Heart Higher Secondary | PERCENTAGE-100%

March 2021

EXPERIENCE

NDZ, INFOPARK

June -July 2025

Developed RESTful APIs using Node.js and Express.js, implementing routing and middleware handling. Built responsive frontend components using React.js and integrated them with backend services. Gained a strong foundation in MERN stack fundamentals including MongoDB, API testing and debugging workflows.

CAPSTONE | [Link](#) | MITS, VARIKOLI

Mar 2025 – Present

Development of a smart autonomous delivery robot for my capstone project at MITS. Using ROS2, Implemented autonomous navigation and system control. Integrated AI models to classify sign boards and perform real-time object tracking.

PROJECTS

Autonomous Rescue Robot | [Link](#)

Developed a disaster-response robot capable of navigating hazardous terrains using LiDAR, GPS and embedded systems. Implemented AI-based human detection using OpenCV on Raspberry Pi with real-time location transmission to assist rescue teams in early-stage operations.

Autonomous UAV System | [Link](#)

Developed a UAV capable of GPS-denied navigation using optical flow stabilization, LiDAR-based altitude control and advanced sensor fusion techniques. A passive docking system with a dual-UAV base station for autonomous landing, coordination and extended mission operations.

CORE COMPETENCIES

Technical Skills:

AI ML, Deep Learning, Computer Vision, NLP, Data Science, ROS2, Autonomous Navigation, SLAM, Path Planner, Sensor Fusion, OpenCV, Python, C++, TensorFlow, PyTorch, MERN Stack, Full-Stack Development, Git, IoT, Robotics Systems

Soft Skills:

Leadership, Problem Solving, Teamwork, Adaptability, Critical Thinking

Extra curriculum:

Mulearn ROS & IOT IG Lead of MITS, VARIKOLI

Aug 2025- Present

CAPSTONE project Team Lead | ROS Operator

WORKSHOPS & COMPETITIONS

E-YANTRA ROBOT COMPETITION

Jun –Dec 2024

GDG SOLUTION CHALLENGE| Hackathon

Jan-Mar 2025

HACKGEN AI | Hackathon | Top 100| KSUM

June 2025

IndiaAI Impact GenAI Hackathon – 4TH Rank

Aug-2025

IRoC-U 2026 | Shortlisted for Elimination Round

Jan-Present 26

CERTIFICATES

[IEEE-IAYPC](#)

[Azure Fundamentals](#)

[MATLAB-OPTIMIZATION](#)

[AI&ML-KODACY](#)