SATYAM MISTARI

mistarisatyam@gmail.com | Pune, MH, India | linkedin.com/in/satyam-mistari-a10309322

PROFESSIONAL SUMMARY

AI/ML/Robotics engineer with strong experience in **machine learning, computer vision, and data-driven systems**, applied to real-world robotics, healthcare, and automation problems. Comfortable working across the full ML lifecycle — **data preparation, model training, evaluation, deployment, and system integration**. Strong problem-solving mindset with experience building scalable, production solutions.

EDUCATION

Ajeenkya DY Patil Schol of Engineering **May 2023 - May 2027**
Bachelor's, Robotics/Mechanical Engineering
- Specilizations in Robotics/Machine Learning

CERTIFICATIONS

- **Machine Learning & Deep Learning** – Coursera
- **NLP/Computer Vision Fundamentals** – Coursera
- **100xDevs (Harkirat Singh)** – Backend, systems, and scalable engineering

PROJECTS & OUTSIDE EXPERIENCE

Holo Battalion – Coordinated Swarm Robotics (Ongoing) e-Yantra Robotics Competition 2025 – IIT Bombay
ML Engineer / Developer
- Developed ML-based vision systems for detecting and classifying warehouse objects.
- Worked on decision logic and coordination algorithms for multiple autonomous agents.
- Built data-driven logic for optimizing movement and task allocation.
- Focused on reliability in dynamic, real-world environments.
- Key Skills Used:
- Computer Vision, ML Pipelines, Optimization Logic, Python

Warehouse Drone :- e-Yantra Robotics Competition 2024 – IIT Bombay
AI / Robotics Engineer
- Developed an autonomous indoor warehouse drone using ROS, MAVROS, and Python.
- Implemented computer vision–based navigation and precision landing using OpenCV.
- Achieved 95%+ success rate in autonomous docking and localization under dynamic warehouse conditions.
- Designed modular flight control, perception, and decision-making pipelines aligned with industrial automation standards.
- Optimized navigation and safety logic for reliable operation in cluttered indoor environments.
- Evaluated system performance through repeated autonomous flight trials.
- Improved reliability in complex, unstructured indoor environments.

LunaBot – Autonomous Navigation Robot for Lunar Habitats (In Development)
ML/Computer Vision Developer
- Built an AI-driven autonomous navigation system for environments without GPS.
- Designed perception pipelines using LiDAR, camera, and IMU data.
- Implemented obstacle detection and environment understanding using computer vision and ML techniques.
- Integrated ML-based decision-making with real-time navigation logic.
- Evaluated system performance using simulation-based testing with realistic conditions.
- Structured codebase in a modular, production-style architecture.
- Key Skills Used:
- Machine Learning, Computer Vision, Sensor Fusion, Model Evaluation, Python, ROS

eHEALTHWAVE – Secure Digital Health Records Platform
Backend & ML Systems Contributor
- Worked on data pipelines for secure medical data handling.
- Designed access-controlled systems to ensure privacy and data integrity.

- Applied system design principles used in real enterprise software.
- Experience working with security-sensitive and compliance-driven data.
- Key Skills Used:
- Distributed Systems, Data Pipelines, Backend Engineering

SKILLS

Machine Learning & AI: Machine Learning & AI, Supervised & Unsupervised Learning, Model Training, Evaluation & Optimization, Feature Engineering & Data Preprocessing, Inference Pipelines & Experiment Tracking
Deep Learning: CNN-based vision models, PyTorch, TensorFlow, Keras, NLP & representation learning (foundations)
Computer Vision: Object Detection & Classification, Vision-based perception pipelines, Image Processing (OpenCV)
Programming & Tools: Python, NumPy, Scikit-learn, Git, GitHub, Linux
Data & Storage: PostgreSQL, MongoDB

ACHIEVEMENTS

Finalist at **Smart India Hackathon (SIH)** among **68K+** teams nationwide;
Top-15 at **Hack2Future (35K+ participants).**
Finalist at **Hack2Crack (40K+ students)**.
Active contributor to **10+ national & international hackathons**.