# Nandu Rajesh

♦ Thiruvaniyoor, Ernakulam, 682308☑ iamnandurajesh@gmail.comᢏ 7012749823

# **Professional Summary** \_

Passionate AI/ML Engineer with expertise in computer vision, robotics, and full-stack development. Currently pursuing B.Tech in Artificial Intelligence with a strong academic record (CGPA: 9.71). Experienced in developing autonomous systems, implementing deep learning models, and leading media production teams. Combines technical proficiency in AI frameworks with hands-on hardware experience using embedded systems and microcontrollers.

## Education \_

## B.Tech in Artificial Intelligence, Muthoot Institute of Technology and Science

Aug 2022 - May 2026

• Current CGPA: 9.71/10.0 | Specialization: Computer Vision, Minor in Electronics

Higher Secondary (Science), SMCS Thiruvaniyoor

2022

## Experience \_\_\_\_\_

## Research & Development Intern, Enproducts, Kochi

Jan 2024 - Present

- Developed autonomous AGV cart, AI jewelry measurement system, and Big Fuse detector for industrial automation
- Implemented computer vision solutions using YOLO, ROS2, and embedded systems

#### Full Stack Web Development Trainee, 100xDevs Cohort by Harkirat Singh

June 2025 – Present

- Gained hands-on experience in full stack web development using React.js, Node.js, Express, and MongoDB
- Built scalable MERN stack applications, including authentication, routing, and API integrations

#### Full Stack Development Intern, IBM SkillsBuild

• Completed comprehensive training in web development and agile methodologies

#### Media Director, TEDxMITS | Outreach Lead, TinkerHub | Media Lead, MuLearn

2023 - Present

- · Led multimedia production teams
- Managed community outreach programs and technical content creation

# Key Projects \_\_\_\_\_

#### **Autonomous Industrial AGV Cart**

2025

- Self-navigating cart for industrial automation and parts transportation
- Tech Stack: ROS2, YOLO, Jetson Orin Nano, Computer Vision

# **AI Jewelry Stock Measurement System**

2025

- Automated inventory system with high accuracy in stock counting
- Tech Stack: YOLOv8, Paddle OCR, Python, OpenCV

# **Big Fuse Detector for EV Units**

2024

- Automated fuse detection system for power distribution box quality control
- Tech Stack: YOLOv8, Computer Vision, Industrial Automation

#### **SnapFlow - AI Event Photography Management**

- Al-powered photo sorting with face recognition and privacy controls
- Tech Stack: MERN, Django, OpenCV, DeepFace, ArcFace, MySQL, Celery

## Technical Skills \_

Programming Languages: Python, C, Java, JavaScript, HTML, CSS, SQL

AI/ML Frameworks: PyTorch, TensorFlow, Keras, OpenCV, scikit-learn, Pandas, NumPy

Computer Vision: YOLO (v8), OpenCV, DeepFace, ArcFace, Image Processing, Object Detection

**Robotics & Hardware:** ROS2, Jetson Orin Nano, Raspberry Pi, ESP32, Arduino **Development Tools:** Git, Docker, Django, MySQL, Linux, Jupyter Notebook

## **Certifications** \_

- Elevate 100XDEV
- Python for Data Science NPTEL
- Computer Vision and Image Processing NPTEL
- Digital System Design NPTEL
- Keras and TensorFlow for Deep Learning Online Course
- Prompt Engineering Certification Program
- IBM Full Stack Development IBM SkillsBuild
- B1 Level Lingua Skill Exam Language Proficiency

# Leadership & Activities \_\_\_\_\_

## TinkerHub Outreach Lead & MuLearn Media Lead

2023 - Present

 Led technical community outreach programs and managed social media content strategy

#### Next Studios, Founder

2022 - Present

- Founded freelance photography and videography venture specializing in event management
- Managed end-to-end event production for corporate clients and academic institutions