OM RODE

Chennai, India | P: +91 9370571751 | omrode.work@gmail.com |Github |Linkedin

Computer Vision & Robotics Engineer specializing in deploying deep learning models, automating MLOps pipelines, and building real-time systems for drones and edge devices. Proficient in Python, with hands-on experience in both startup and defense sectors.

EDUCATION

St. Vincent Pallotti College of Engineering (Nagpur University) — Nagpur, MH, India
Bachelor of Technology — Jul 2020 - July 2024
Major in Electronics and Telecommunication Engineering
Cumulative GPA: 8.0/10; Student of the Year Nominee 2024
Relevant Coursework: Embedded Systems, Digital Signal Processing; Control Systems; Microcontrollers; Computer Vision

Dharampeth M.P Deo Memorial Science College (HSSC) — Nagpur, MH, India
HSSC (Class 12), Science Stream – Maharashtra State Board | 72.92% — Graduated Feb 2020

Blue Diamond High School (HSSC) — Nagpur, MH, India
SSC (Class 10), Maharashtra State Board | 89.98% — Graduated Mar 2018

WORK EXPERIENCE

Quantic Tech Analysis — Chennai, India
AI Engineer I (Computer Vision) — July 2024 – Present
- Automated MLOps workflows for data collection, transformation, and model training, improving pipeline efficiency.
- Led model development(ML Flow), including data evaluation, weight transfer between models(WandB), and deployment in production environments with optimized quantization(ONNX/TensorRT).
- Developed robust solutions for RTSP environments, CUDA-based server/Jetson installations, and multi-threaded Python apps for simultaneous detection and cloud operations(MongoDB).

Solar Industries India Limited — Nagpur, India
Robotics Intern (Computer Vision) — Dec 2023 – June 2024
- Developed autonomous drone systems using ROS, DroneKit, and Gazebo; implemented multithreaded CV pipelines for target following, obstacle avoidance, and PID-tuned flight tested in tethered environments.
- Deployed a YOLO-based worker occupancy system with PostgreSQL for real-time tracking and entry/exit logging.
- Managed 30+ camera feeds in a multithreaded architecture on NVIDIA A1000 for high-throughput inference.

TECHNICAL PROJECTS

Autonomous Drone Navigation – Solar Industries — Jan 2024
Built ROS2-based autonomous drone using YOLOv8 for person tracking and obstacle avoidance. Achieved 25 FPS on Jetson Orin Nano, with <70 ms inference latency, and reliable obstacle avoidance up to 3.5 meters in indoor environments. Integrated PID control for smooth flight

LEADERSHIP & INITIATIVES

Formula Ashwariders (Formula Student Team) — Nagpur, India
Team Captain & Control Electronics Engineer — Sep 2021 – June 2024
Led a 27-member team for Formula Bharat, managing project timelines, team dynamics, and electronics systems. Oversaw sponsorship, fundraising, and budget management.

Intel® Unnati Grand Challenge — Banglore, India
Hackathon Leader — Jan 2022 – Jan 2024
Led teams to 2nd place (2022) and Top 10 (2023) in Intel's challenge, securing a cumulative ₹80K cash prize for computer vision projects.

SKILLS & TOOLS

Technical Skills: Advanced in YOLO, OpenCV, PyTorch; Git, Docker, Jetson, TensorRT, ONNX, Tensorflow, Rest APIs, MongoDB, OpenAI Gym,