ASIF MUSAFIR

Karnataka, India 580023
9986496962 aasifmusafir@gmail.com Asif Musafir AasifMusafir

SUMMARY

AI/ML and Vision Engineer with hands-on expertise in AI-driven automation, computer vision, and Generative AI (GenAI) solutions. Specialized in designing and deploying end-to-end pipelines for object detection, segmentation, tracking, OCR, and defect detection. Strong expertise in PyTorch, YOLO, OpenCV, Python, real-time inference, model optimization, and PLC-integrated automation systems.

EDUCATION

KLE Technological University **Aug 2020 – Nov 2024**
Bachelor of Engineering - Electronics and Communication *Hubli, India*

SKILLS

Languages	Python, C, C++
Libraries	PyTorch, OpenCV, NumPy, Pandas, Matplotlib, NLTK
Tools	Git, Visual Studio, Roboflow, Docker, Zoho sprints
Technologies	Computer Vision, Machine Learning, Deep Learning, NLP, OOP

EXPERIENCE

PICKLEAI INNOVATIONS PRIVATE LIMITED **Mar 2025 – Present**
Jr. Deep Learning Engineer (Computer Vision / Machine Learning) *Bengaluru, India*

Quality Control for FMCG Products

- Developed and deployed real-time computer vision–based defect detection systems for FMCG production lines, achieving **98% inspection accuracy** and significantly improving production efficiency.
- Implemented pre and post-process visual inspections to ensure product integrity reducing **error rate to less than 0.3%.**
- Implemented **computer vision–based OCR System** to detect printing defects, incorrect labels, and packaging mismatches.
- Ensured high text recognition accuracy under challenging industrial conditions, enhancing **automated quality control.**
- Enabled automated defect rejection by integrating ML inspection outputs with **PLC control**, ensuring real-time traceability through a centralized dashboard.

Automated Multi-Camera License Plate Detection and Recognition System

- **Configured IP camera–based ANPR** pipeline with distance and ROI constraints to detect license plates only within the operational range, improving detection accuracy and minimizing false positives.
- Built a coordinated **multi-camera pipeline** using shared inference and asynchronous processing for efficient **real-time performance.**
- Applied **validation and consistency checks** to minimize the errors and maximise system reliability.
- Designed a scalable, **configuration-driven** system supporting video recording, frame capture, and seamless backend API integration.
- Achieved end-to-end license plate recognition accuracy of **96%** under real-world weather and lighting conditions.

Skyfire Applied Intelligence Pvt Limited(Atom360) **Feb 2024 – Sep 2024**
Artificial Intelligence Developer Intern *Bengaluru, India*

- Conducted **Image quality assessments** specifically focusing on blur detection and image exposure detection to optimize images for accurate diagnosis of the Oral cancer disease.
- Developed and deployed machine learning algorithms for **Image processing on edge devices.**
- Experimented with different models and trained a blur classification model using **transfer learning** with 96% accuracy and an exposure classification model using **CNN with 91% accuracy**, then ensembled both models for a single output.
- Designed **computer vision algorithms** for background identification and filtering

CERTIFICATIONS

- Complete Machine Learning and Data Science Program by GeeksforGeeks
- OCI Generative AI Professional by ORACLE
- Azure Cloud Fundamental AZ-900 by LinkedIn