Netal Daga

Experience Summary

- AI/ML Developer with 1.5+ years of hands-on experience in computer vision, backend engineering, and intelligent automation.
- Proven track record in developing and deploying scalable AI models, automating workflows, and integrating real-time systems across industrial environments.
- Skilled in data processing, scripting, and edge/cloud deployment to enhance operational efficiency and system scalability.
- Adept at handling large datasets, building secure APIs, and optimizing model performance for defect detection and classification.
- Passionate about solving real-world problems through innovation, collaboration, and continuous learning.

Skill Set

Computer Vision & NLP	• Developed object detection, classification, and segmentation models (YOLOv8, Faster R-CNN, CNNs). • Implemented NLP tasks for text extraction and structuring from unstructured sources. • Optimized real-time inference via threshold tuning and ROI adjustments. • Deployed models on edge devices and cloud platforms. **Tools:** OpenCV, PyTorch, TensorFlow, Hugging Face, spaCy, NLTK
Data Annotation & Preprocessing	• Annotated images/videos for detection and classification using industry-standard tools. • Applied data augmentation and quality checks to improve model accuracy. • Automated annotation workflows using Python scripts. **Tools:** Solomon META-AIVI, LabelImg, Roboflow
Model Testing & Deployment	• Conducted on-site and remote model testing, debugging, and accuracy analysis. • Optimized NG/OK classification logic for real-world defect detection. • Benchmarked performance across environments and project configurations. **Tools:** ONNX, Docker
API Integration & Automation	• Integrated REST APIs for model inferencing, data retrieval, and job folder management. • Structured data flow using JSON and MongoDB; automated workflows via webhooks. **Tools:** FastAPI, Flask, Requests, Postman, MongoDB

Scripting & System Automation	• Built Python scripts for data extraction, conversion, and logging. • Automated backups and API calls using Cron Jobs and Shell scripts. • Implemented error handling and system monitoring for stable AI pipeline execution. **Tools:** Python, Bash, Cron Jobs, Pandas, NumPy, Ubuntu Linux

Project Details

Sr. No.	Project	Duration (Months)	Role & Responsibilities
1.	**NextGen AI Vision System** Client: **TACO**	3 (ongoing)	**Role: AI-Developer** ☞ Part of development of a scalable AI vision system for CURVV EV battery inspection, tailored for Indian manufacturing environments. ☞ Integrated multiple YOLOv8 models for bolt alignment, connector locking, barcode, QR, and OCR detection. ☞ Developed unified FastAPI endpoints for all models; implemented JWT-based authentication for secure backend access. ☞ Conducted on-site testing, client interaction, and iterative optimization based on shop-floor feedback. ☞ Delivered live demo to senior management; reduced inspection errors by ~40% and operational risk by ~2%. ☞ Currently building real-time dashboards and automated reporting modules for visual analytics and performance tracking.
2.	**Solomon META-AIVI** It is a technology company focused on developing innovative AI and machine learning solutions for industrial and manufacturing sectors. They specialize in computer vision, real-time inferencing, and automation, enabling businesses to optimize processes, improve efficiency, and enhance product quality. Their solutions cater to diverse industries, providing cutting-edge tools for quality control, defect detection, and workflow automation. Client: **Fleetgaurd Filtrum Pvt Ltd.**, **TACO**	14	**Role: Developer & Tester** ☞ Analysed client requirements for object detection, classification, defect analysis, and object counting to define tailored solutions. ☞ Led data annotation strategy considering lighting, shadows, FOV, and angles, prepared datasets for model training and testing. ☞ Conducted model testing both in simulation and on-site; collaborated directly with client teams for feedback and refinement. ☞ Optimized real-time inferencing through threshold tuning and ROI adjustments; resolved network latency issues during deployment. ☞ Integrated REST APIs for seamless data flow between edge devices and server infrastructure.

			☞ Automated daily data backups using Cron Jobs and Shell scripting for audit compliance and reliability.
3.	**Plural Virtual Assistant** As an intern at Plural Technology, I worked on an innovative project aimed at revolutionizing workplace management. This project integrates advanced technologies such as artificial intelligence, facial recognition, and natural language processing to optimize office operations and enhance security. The Plural Virtual Assistant streamlines entry processes, automates administrative tasks, and provides a personalized user experience, setting a new standard for modern workplace efficiency and security.	5	**Role: Developer** ☞ Developed a smart office assistant integrating facial recognition, NLP, and appointment scheduling to streamline workplace access. ☞ Implemented face recognition using VGGFace and ResNet50; built scalable backend with Python and FastAPI. ☞ Designed dynamic UI with ReactJS for real-time visitor interaction and personalized guidance. ☞ Automated workflows using Microsoft Flow; managed visitor data via SharePoint Lists and SQL for secure access control. ☞ Delivered a robust, maintainable system enhancing operational efficiency and workplace security.

Educational Background

Degree	University	Year of Passing
B. Tech (Artificial Intelligence & Data Science)	Vishwakarma Institute of Information Technology, Pune	2024