

Azeem Aslam

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[Portfolio](#) | [Linkedin](#) | [Github](#)

ABOUT ME

Senior Computer Vision Engineer with proven experience delivering **production-scale vision systems** used in real-world environments. Deep expertise in **YOLO-based detection and segmentation**, dataset strategy, model evaluation, and deployment using **Python, PyTorch, TensorFlow, Docker, FastAPI, and AWS**. Trusted to **own end-to-end CV pipelines**, lead **data annotation and quality workflows**, and collaborate with distributed teams to ship reliable models across **automotive, healthcare, manufacturing, and public-sector** use cases.

DIGITAL SKILLS

Core Competencies: Analytical Skills, Mathematical Skills

Computer Vision: Computer Vision Systems, Object Detection, Image Segmentation, YOLOv8, YOLOv9

Machine Learning Frameworks: PyTorch, TensorFlow, Scikit-learn

Computer Vision Libraries: OpenCV, MediaPipe

Data & Dataset Management: Dataset Strategy, Data Annotation, Annotation Quality Control, Dataset Validation

Model Evaluation Metrics: Mean Average Precision (mAP), Precision, Recall, F1 Score

Deployment & Engineering: FastAPI, Docker, Amazon Web Services (AWS), SQL, Pandas

WORK EXPERIENCE

OdyxAI (USA – Remote)

Senior Computer Vision Engineer | 2025 – Present

- Owning development of **car damage detection and segmentation pipelines** using YOLOv8 for production automotive systems.
- Leading the **data annotation and computer vision workflow**, including annotation guidelines, review cycles, and quality assurance.
- Coordinating distributed annotation teams to maintain **label accuracy, class balance, and dataset version control**.
- Driving model improvements through **dataset refinement, augmentation strategy, and error analysis**.
- Training and evaluating models in PyTorch, consistently improving **mAP and real-world robustness**.
- Delivering models ready for **production integration**, working closely with engineering and product teams.

Crime Surveillance Unit (CSU, CM House), Government of Punjab

AI / Data Scientist | 2025 – Present

- Designing analytics pipelines for **large-scale complaint, FIR, and performance datasets** across districts and police stations.
- Automating data cleaning, transformation, and KPI computation using Python and SQL.
- Producing operational insights related to **response times, resolution rates, and workload distribution** for leadership decision-making.

OmniDent.ai (USA – Remote)

Computer Vision Engineer | 2024 – Present

- Built **pose and gait estimation models** using PyTorch and TensorFlow for healthcare monitoring applications.
- Designed augmentation pipelines to improve model stability under **noise, occlusion, and motion variation**.
- Validated real-time pose tracking using **MediaPipe and OpenPose**.

UVAS & NAVTTC (Pakistan)

Lecturer & AI Trainer | Sep 2025 – Present

- Taught AI, Data Structures, and Robotics to 200+ students & trainees.
- Supervised AI projects (YOLO detection, Streamlit/Flask apps).

Punjab Safe Cities Authority (Pakistan)

Communication Officer | Jul 2017 – Aug 2023

- Contributed to AI-driven video analytics (object detection, anomaly detection).
- Supported IoT-based urban safety & surveillance initiatives.

EDUCATION AND TRAINING

University of Salford Sep 2023 – Nov 2024

MSc, Internet of Things with Data Science

GPA: Distinction

Achievements: Thesis: A deep learning framework for advanced vehicle/image classification and recognition

Coursework: Big data tools and techniques, Privacy in IoT devices, Machine learning and data mining

University of Sargodha Sep 2012 – June 2016

Bachelor of Science, Information Technology

GPA: A

Achievements: Thesis: JobFlow: Optimizing Recruitment with an ATS Solution

Coursework: Calculus and analytic geometry, Object-oriented programming, Database management system, Web systems and technologies, Information retrieval

PROJECTS

Industrial Object Detection

Advanced object detection system for industrial applications.

Diabetes EDA and Modelling

EDA and predictive modelling for diabetes dataset.

Credit Card Financial Dashboard

Interactive financial dashboard for credit card data analysis.

Pakistan Crime Analysis

Crime data analysis and visualization for Pakistan's crime trends.

Clinical Trial Insights

Data analysis and visualization of clinical trial data using RDD, DataFrames, ML, and SQL.

Traffic Accident Analysis

Analysis and visualization of traffic accident data to uncover patterns and trends.

HONOURS AND AWARDS

Thinking Like an Analyst: Maven Analytics [Maven Analytics](#)

Professional Certificate: Product Management and Development [Udemy](#)

Project Management Skills for Leaders [Linkedin](#)

GDPR Compliance: Essential Training [Linkedin](#)

Google Analytics [Great Learning](#)

Securing the IoT: Security Risks [Linkedin](#)

HIPAA Privacy & Security Training (with Breach Notification) [HIPAA Training us](#)

Machine Learning with Python: Foundations [Linkedin](#)

Machine Learning with Python: k-Means Clustering [Linkedin](#)

GitHub for Data Scientists [Linkedin](#)

Learning Power BI Desktop [Linkedin](#)

LANGUAGE SKILLS

Urdu (Mother tongue)

English (LISTENING C2 READING C2 WRITING C2 SPOKEN PRODUCTION B2 SPOKEN INTERACTION C1)