

KEDAR DAVE

Machine Learning Engineer | kedardave2909@gmail.com | [LinkedIn](#) | [GitHub](#)

PROFESSIONAL SUMMARY

Machine Learning Engineer with strong expertise in Generative AI, LLMs, and Computer Vision. Proven track record in architecting RAG pipelines, optimizing deep learning models (YOLO, ResNet), and deploying scalable AI solutions on Cloud platforms (AWS, Azure). Adept at bridging the gap between theoretical research and production-grade engineering.

TECHNICAL SKILLS

Languages: Python, C++, SQL, JavaScript

AI & ML: Generative AI, LLMs, RAG, Computer Vision (YOLO/ResNet), NLP, PyTorch, TensorFlow

Cloud & DevOps: AWS, Azure, Docker, Kubernetes, Terraform, CI/CD (GitHub Actions), MLOps

Data & Tools: MongoDB, PowerBI, Tableau, Git, REST APIs, System Design, Data Structures & Algorithms

EXPERIENCE

Artificial Intelligence Intern / *Plutomen Technologies* Sep 2023 – May 2024

- Architected a RAG pipeline for an internal knowledge base, reducing information retrieval time by 40%.
- Optimized vector search algorithms and integrated LLM-based response generation for high accuracy.
- Collaborated with cross-functional teams to deploy models using Python and Vector DBs.

Machine Learning Engineer Intern / *AcmeGrade* May 2022 – Jul 2022

- Developed a CNN-based leaf disease detection system achieving 92% accuracy using ResNet50.
- Implemented data augmentation and hyperparameter tuning to improve model robustness by 15%.
- Deployed the classification model using TensorFlow and Computer Vision techniques.

PROJECTS

IntelliSearch (Semantic Search Engine) / *Python, Flask, MongoDB, OCR*

- Built a semantic search engine handling large PDF datasets using OCR and vector embeddings.
- Solved context loss in keyword search, enabling natural language querying for document retrieval.

Plottwist (Multimodal Analysis) / *Python, YOLOv5, LLMs*

- Developed a pipeline to interpret chart data using YOLOv5 for detection and LLMs for analysis.
- Achieved 89.2% mAP and reduced interpretation time by 70% compared to manual methods.

ImposterCreator (Deepfake Motion Transfer) / *PyTorch, Computer Vision*

- Created a motion transfer framework using First Order Motion Model for realistic video synthesis.
- Simulated realistic facial expressions with 96.4% success rate in motion transfer.

Sales Analysis Dashboard / *PowerBI, DAX, Data Modeling*

- Designed a unified dashboard with star schema modeling, analyzing \$163K in regional sales.

RESEARCH

Approaches and Applications of Lane Detection / *ICSCSA 2024*

- Authored a paper analyzing lane detection methodologies for autonomous vehicles, evaluating efficacy across diverse environmental conditions.

EDUCATION

Seneca Polytechnic / *Cloud Computing & Admin (GPA 4.0)* 2025

Humber Polytechnic / *AI with Machine Learning (GPA 3.5)* 2024 – 2025

Charotar University / *B.Tech Information Technology (GPA 3.9)* 2020 – 2024