Aditya Kushal

+91 97664 58874 | adityakushal23@gmail.com | linkedin.com/in/akxy4321 | github.com/AKxy4321

EDUCATION

RV University - CGPA: 9.57/10

Bengaluru, KA

Bachelor of Technology in Computer Science, Minor in FinTech

Nov. 2022 - Jun. 2026

EXPERIENCE

Summer Internship

Jul. 2024 - Sep. 2024

RV University

Bengaluru, KA

- Led a team of 3 to design and implement pruning techniques for deep learning models, improving efficiency without significant accuracy loss in Tensorflow.
- Developed a **Cosine Similarity—based filter pruning** approach to identify and remove redundant filters, reducing information loss.
- Achieved a 14.5× reduction in LeNet-5 model size with only 0.85% accuracy drop, enabling faster inference and lower memory usage.

Deep Learning Intern

Sep. 2023 – May 2025

VectraTech Global

Bengaluru, KA

- Developed deep learning models for breast cancer detection using annotated mammography datasets.
- Implemented BIRADS Classification with VGG16 and Breast Cancer Object Detection with YOLOv7.
- Trained Breast Density Estimation on VGG16, achieving 99.76% accuracy on the InBreast dataset.
- Created robust training and testing samples using **Augmentor** for data augmentation.

Artificial Intelligence Intern

Aug. 2023 - May 2024

Bengaluru, KA

Shaale

- Built a domain-specific chatbot by integrating the OpenAI API with the company's custom knowledge base.
- Enhanced retrieval accuracy by implementing the Cohere Reranker API, improving relevance of responses.
- Integrated the **Tavily Web Search API** to provide real-time external information, expanding chatbot capabilities.

Projects

Obstacle Avoidance System for Visually Impaired | Python, PyTorch, Ultralytics

Jan. 2024 – May 2024

- Trained a YOLOv8-nano object detection model to detect potholes, light poles, vehicles, and roadside stalls.
- Generated real-time auditory feedback with object categories and counts to assist visually impaired users.

Travel Recommendation System | Python, Pandas, Scikit-learn

Jan. 2024 – Feb. 2024

- Developed a personalized recommender where users swipe to accept or reject categories.
- Recommended the top 10 cities by computing similarity scores against a curated dataset.

TECHNICAL SKILLS

Languages: Python, C, SQL

Deep Learning: PyTorch, TensorFlow, YOLOv7/YOLOv8, Model Pruning/Compression, Transfer Learning

Machine Learning: Scikit-learn, Pandas, NumPy

APIs/Tools: OpenAI API, Cohere API, Tavily API, Git, Conda/Pip