

Zaheer K Z

zaheer.work24@gmail.com | +91 9353333151 | GitHub | LinkedIn

Machine learning engineer with **2+ years** of experience in designing, developing, and deploying ML models. I aim to apply my experience in AI/ML lifecycle management, predictive analytics, and AI development to contribute to impactful, efficient, and forward-looking solutions.

EXPERIENCE

NEUTRINOS | MACHINE LEARNING ENGINEER - II

Feb 2024 - Present | Bengaluru, India

- Developed and implemented a **high-accuracy Key-Value Pair Detection Model** utilizing **YOLOv8, OCR, and Seldon Core (Inference API)**, achieving up to **99% field-level accuracy**.
- Developed an **Intelligent Document Processing (AI-HUB) platform** supporting advanced **document and text classification** as well as **Extraction** tasks, by leveraging **AutoML frameworks, RabbitMQ, Celery, MongoDB, and FastAPI**; **reduced development time and improved model performance through automation and scalable architecture**.
- Deployed **offline-trained ML models** as **scalable microservices** using **Docker, Kubernetes, and FastAPI**, supporting **sync single-request APIs and async batch inference** with **messaging queues** for **efficient, secure, and reliable** production deployment.
- Designed and implemented a **configurable GenAI application** with an integrated **guardrail layer** for **Large Language Models (LLMs)**, enabling **PII masking in user inputs** and supporting **OCR Extraction, language translation, MCP, API/tool invocation** (including **API specs**), **vector search (RAG, User authentication** and more, enabling a **highly secure, flexible and customisable AI platform** tailored to various **business use cases**.
- Technologies** - Python, Machine Learning, Deep Learning, NLP, RabbitMQ, Celery, Redis, ELK, Ollama, FastAPI, Jenkins, Docker, Kubernetes, MLflow, DBT, MongoDB, Keras, Tensorflow, Langchain, MCP, VectorDB, Prompt Shielding, PII Masking.

PROJECTS

PAPERMATE | DELIVERS PERFECT ARXIV PAPER'S | JUNE - 2023

- Built and deployed an **NLP-powered project** providing **personalized arXiv paper recommendations** in AI, ML, DL, and Computer Vision.
- Integrated **question answering and summarization**, boosting user satisfaction from **65% to 85%**.
- Stack: Python, Transformers, LLM's, LangChain, Django, AWS; Database: PostgreSQL, VectorDB.

BREAST CANCER PREDICTOR | CANCER CLASSIFIER

- Built a **machine learning model** achieving **98% precision** in predicting benign vs malignant tumors using **logistic regression**.
- TechStack: **Scikit-Learn, Pandas, Matplotlib, Streamlit**.

EDUCATION

BROTOTYPE

MACHINE LEARNING
2022 | Calicut, Kerala

UNIVERSITY OF MYSORE

BACHELOR OF COMPUTER
APPLICATIONS
July 2022 | CGPA: 8.3/10

RAFFELS INTERNATIONAL PRE-UNIVERSITY

ECBA
2019 | Cum. Per: 79.2%

SKILLS

PROGRAMMING

- Python

TECHNOLOGIES

- Natural Language Processing (NLP)
- Computer Vision • OCR • RAG
- Machine Learning • Deep Learning
- Generative AI • Auto-ML Frameworks
- NumPy • Pandas • SkLearn • Pytorch
- TensorFlow • Transformers • FastAPI
- LangChain • Langraph • MLflow
- MongoDB • RabbitMQ • Celery
- Jenkins • GCP • Azure • AWS • ELK

PRODUCTIVE TOOLS

- GitHub Actions • K9s • Docker
- Jupyter Notebook/ lab • Git
- BitBucket • Kibana • Notion
- GenAI tools

COURSEWORK

- Generative AI
- Machine Learning
- Computer Vision (OpenCV)
- Docker and Kubernetes
- Natural Language Processing
- Data Structure and Algorithm
- Fine-tuning LLMs (LoRA/QLoRA)

LANGUAGES

- English • Hindi • Kannada
- Malayalam • Tamil