#### SAIM KHALID

Al Engineer | Deep Learning | Generative Al +923070588456 | saimkhalid650@gmail.com| aidevsaim.com | Islamabad, Pakistan

I'm a highly motivated AI engineer with three years of experience in Computer Vision, Generative AI, Natural Language Processing, and working in production environments. With proven success in both independent and team settings, I'm eager to contribute to innovative AI projects.

#### **EDUCATION**

# Masters in Computer Science (MSCS). PMAS Arid Agriculture University

Nov 2022

# Bachelors in Computer Science (BSCS). COMSATS University

Jul 2020

## **EXPERIENCE**

Techtronix Corp. June 2025 - Present

### Al Engineer

 Built a LangGraph-based chatbot using Mistral LLM to convert natural language queries into MongoDB queries with ChromaDB for semantic retrieval.

Self Employed Oct 2024 - May 2025

### Al Engineer

- Developed a handwriting OCR pipeline using Qwen2 VLM, deployed via FastAPI & MLflow, with OpenAI-powered prompt engineering and NER for structured text extraction.
- Vision Transformer for Heart Xray Image Classification using transfer learning.

iOPTIME Pvt. Limited. Nov 2022-Aug 2024

### Al Engineer

- Fine-tuned GPT-3.5 Turbo with RAG and Langchain for product inquiries in e-commerce.
- Implemented LLAMA 2/3 with RAG via Langchain for audit report analysis.
- Fine-tuned GPT-3.5 for healthcare assistance in a medical chatbot, Deployed to local server using Fast API and Docker
- Gained insights into Zimbabwe's healthcare challenges and explored AI solutions during a business tour.
- Built an OCR system for South African and Zimbabwean IDs and passports.
- Enhanced entity extraction from OCR Strings using OpenAl for Named Entity Recognition (NER). Deployed on a Local server using Docker and Fast API.
- Developed a counting app to count objects in an Image using YOLOv8 and OpenCV. The Model was deployed on AWS using Fast API and Docker.
- Developed a Texas Hold'em card App with object detection using YOLOv5, Deployment on Android and iOS
- Deployed Arc Face with Media Pipe Face Mesh on Local Server using Django, NGNIX, OpenCV and Docker for face recognition in Zimbabwe.
- Implemented advanced face liveness detection using OpenCV and Python.
- Vehicle Trajectory Analysis using DeepSORT and YOLO, deployed using FastAPI on AWS EC2
- · Nails Segmentation for nail polish design deployed in Android and iOS
- · Fine tuned and Deployed GPT for e-commerce product recommendation
- Causal Inference and Learning for Road Accident Analysis

BXTrack Solutions Jul 2021 - Aug 2022

## Junior ML Engineer

- Developed and deployed a real-time number plate detection system using YOLOv4, achieving 93% accuracy and integrating OCR for text extraction.
- Built NLP pipelines using spaCy and RoBERTa for text classification and entity extraction, and deployed them via REST APIs using Django for scalable application integration.

## **PUBLICATIONS**

## Small Pest Detection in Real Time using Deep Learning Object Detection

Sustainability, 2023

### **CERTIFICATIONS & COURSES**

Python for Data Science, AI & Development

Generative AI with Large Language Models

Machine Learning Operations (MLOps): Getting Started

Introduction to On Device AI

Nov 2021

Feb 2024

Machine Learning Operations (MLOps): Getting Started

Mar 2024

# **SKILLS**

Artificial Intelligence, Machine Learning, Python, Deep Learning, MLOps, Automation, PyTorch, Tensorflow, LLMs, AlAgents, Mlflow, CI/CD, Git, Computer Vision, Natural Language Processing (NLP), Docker, AWS, Langchain, Sagemaker, n8n, FAST API, Lambda, OpenAi, OpenCV, Object Detection, Linux, CUDA, Langchain, VectorDB, ChromaDB, XAI, MongoDB, Langraph

## PROFESSIONAL PROFILES

- · aidevsaim.com
- Github
- Linkedin