

WASEEM ALMAZRUA

AI Engineer | GenAI & Agentic Systems | Computer Vision
waseeme900@gmail.com | +966 555 056 252 | Riyadh, Saudi Arabia | [LinkedIn](#) | [GitHub](#) | [Website](#)

SUMMARY

Result-oriented AI Engineer bridging advanced computer vision and production-grade AI systems. Leveraging a clinical background from KFMC to architect high-precision medical image analysis and cross-industry AI pipelines — turning domain expertise into a technical advantage. Proven track record in full-stack AI deployment, microservices architectures using FastAPI and BentoML, and scalable cloud infrastructure on GCP with strict MLOps practices including model versioning, CI/CD, experiment tracking, and containerized deployment.

SKILLS

Languages:	Python, SQL
Libraries:	pandas, NumPy, scikit-learn, Matplotlib, TensorFlow, Keras, PyTorch, OpenCV, transformers, MONAI, Pydantic, SQLAlchemy, Alembic
Frameworks:	FastAPI, Pydantic AI
Tools:	Docker, MLflow, BentoML, Logfire, CI/CD, Linux, Git, Power BI, PostgreSQL
Platforms:	Google Cloud, FastAPI Cloud, Redis Cloud, Supabase, GitHub, DigitalOcean, Hugging Face
Domains:	Computer Vision, Deep Learning, Model Deployment, Inference Optimization, Medical Image Analysis, MLOps, Model Serving, Model Monitoring, Production ML, Agentic AI, AI Agents, RAG, Vector Databases, Embeddings, NLP, LLM Integration

PROJECTS

Doctor Copilot — Advanced Brain MRI Segmentation AI Link	2025
Deployed Double U-Net + ResNet50 model for brain MRI segmentation achieving Dice 0.87 and IoU 0.82; built a REST API via FastAPI on Google Cloud Run and integrated OpenAI API to power an AI chatbot for clinical result interpretation.	
Technologies: Python, TensorFlow, FastAPI, Google Cloud Run, Docker, U-Net, ResNet50	
Face Mask Detection System — YOLOv8 Link	2025
Built a real-time YOLOv8 system classifying mask compliance (with/without/incorrect) in hospital environments, deployed on Google Cloud Run.	
Technologies: YOLOv8, PyTorch, OpenCV, FastAPI, Google Cloud Run	
CLAIRA-VoiceAnalyzer — Clinical Voice-to-SOAP Note AI Link	2026 – Present
AI-powered clinical voice analysis MVP: converts doctor speech to structured medical intelligence using Faster-Whisper ASR, GLiNER biomedical NER, and GPT for SOAP note generation and clinical reasoning, orchestrated via Pydantic AI and served with BentoML and FastAPI, with Redis Cloud for caching and rate limiting, deployed on FastAPI Cloud with Logfire tracing.	
Technologies: Python, Faster-Whisper, GLiNER, OpenAI API, Pydantic AI, FastAPI, BentoML, Redis Cloud, FastAPI Cloud, Logfire, httpx	
CLAIRA-DeepResearch — Multi-Agent Research System Link	2026 – Present
Multi-agent AI research system with orchestrator, researcher, validator, and writer agents coordinated via Pydantic AI to produce grounded reports with strong citation traceability and hallucination mitigation.	
Technologies: Python, Pydantic AI, OpenAI API, Multi-Agent Orchestration, Agentic AI	
Brats-3D — Brain Tumor Segmentation Platform Link	2026
Full-stack medical AI platform for 3D brain MRI segmentation: React + Auth0 frontend, FastAPI + BentoML microservices backend on Google Cloud Run, model versioning via MLflow model registry with PyFunc wrapper and BentoML registry, direct-to-GCS uploads via signed URLs, automated CI/CD with GitHub Actions, and OpenAI API integration to generate AI-powered clinical summaries of segmentation results.	
Technologies: Python, BentoML, FastAPI, React, Google Cloud Run, GCS, Auth0, GitHub Actions, PostgreSQL, Docker	

EDUCATION

Bachelor's Degree in Nursing Science	2017 – 2022
Shaqra University GPA: 4.88 / 5.0	
Data Science & AI Bootcamp	Aug – Nov 2025
SDA x Le Wagon — Intensive 12-week program	
Covered Python, SQL, machine learning, deep learning, data engineering, and real-world AI project deployment.	

CERTIFICATIONS

Data Analyst Nanodegree — Udacity | AI Programming with Python — Udacity | Programming for Data Science with Python — Udacity | Statistics for Data Analysis — Udacity

EXPERIENCE

Staff Nurse — Surgical Unit	Oct 2022 – Oct 2024
King Fahad Medical City (KFMC) Riyadh, Saudi Arabia	
- Managed care delivery for 4+ surgical patients per shift, maintaining patient safety and clinical documentation standards. - Collaborated with multidisciplinary teams to support clinical quality improvement and outcome tracking initiatives.	