

NISA HOORAIN

AI/ML ENGINEER • FULL-STACK AI & BACKEND ENGINEER • LLM / RAG / AGENTIC AI / COMPUTER VISION

+92 341 2546640 | nisahoorain@gmail.com | Karachi, Pakistan

Portfolio: nisa-hoorain-portfolio.vercel.app | LinkedIn: linkedin.com/in/nisahoorain | GitHub: github.com/Nisahoorain

PROFESSIONAL SUMMARY

Results-driven AI/ML Engineer and Full-Stack Backend Developer with 3+ years of experience building scalable, production-grade intelligent systems. Specialized in LLMs, Retrieval-Augmented Generation (RAG), Agentic AI (CrewAI, LangChain), and real-time Computer Vision. Skilled in model optimization (ONNX), MLOps, and high-performance backend architecture (Django, DRF, Node.js) across software, fintech, and healthcare-adjacent domains. Seeking Data Scientist, AI/ML Engineer, Full-Stack AI Engineer, or Python/Backend Engineer roles (remote or on-site).

CORE COMPETENCIES

Generative AI & LLMs: LLM App Development, Prompt Engineering, RAG Pipelines, Fine-Tuning, OpenAI API, LangChain, LlamaIndex, Vector DBs (Pinecone, FAISS, ChromaDB)

Agentic AI & Automation: CrewAI, Multi-Agent Orchestration, Autonomous Workflow Automation, Tool-Use / Function Calling, LangGraph

Computer Vision: Real-Time Object Detection & Tracking, OpenCV, YOLO, Image/Video Processing, Autonomous Systems, ONNX Optimization & Deployment

ML & Data Science: Predictive Modeling, Anomaly Detection, Time-Series Analysis, Deep Learning (PyTorch, TensorFlow), Scikit-learn, Feature Engineering

Backend & Full-Stack: Python, Django, DRF, Node.js, TypeScript, Prisma, REST/GraphQL APIs, Microservices

Databases & Data Eng.: PostgreSQL, MySQL, SQL Optimization, Schema Design, ETL Pipelines

MLOps & Cloud: AWS, Docker, CI/CD (GitHub/Gitlab Actions), VPS Deployment, Model Serving, Monitoring

PROFESSIONAL EXPERIENCE

AI/ML Engineer - *MParsec*

Dec 2025 – Present

- Design and deploy production LLM and Agentic AI systems, building RAG pipelines and multi-agent workflows (CrewAI) to automate complex business processes.
- Build and optimize computer vision models for real-time detection and tracking, deploying via ONNX for low-latency inference on production and edge environments.
- Develop ML models for anomaly detection and predictive analytics on time-series data; architect scalable pipelines for training, evaluation, and real-time inference.

Backend Engineer - *Bitswits*

Feb 2025 – Dec 2025

- Built and shipped REST APIs using Django, DRF, and Node.js (TypeScript, Prisma) powering high-performance web and mobile applications.
- Designed and optimized PostgreSQL schemas and queries, improving data retrieval efficiency and reducing response latency for core services.
- Implemented CI/CD pipelines with GitHub Actions, and collaborated with AI teams to expose ML/LLM-powered features through clean, documented APIs.

Backend & AI Developer - *IBIS Infiniti International Solutions*

Dec 2022 – Jan 2025

- Led backend development and AI integration for HR systems and payroll dashboards using Flask and Angular.
- Built AI-powered automation solutions using the OpenAI API (LLM-based workflow automation), streamlining manual HR and operations processes.
- Deployed and maintained applications on AWS and VPS infrastructure; coordinated delivery via ClickUp.

EDUCATION

Bachelor of Science in Computer Science (BSCS) — Federal Urdu University of Arts, Sciences & Technology

Intermediate (FSc Pre-Engineering) — Government Degree College, Karachi Board

CERTIFICATIONS & TRAINING

Prompt Engineering for Developers — DeepLearning.AI, Coursera (2025)

Databases and SQL for Data Science — IBM, Coursera (2025)

Backend Development — Aptech (2022)

HTML5 & Responsive Web Design — Aptech (2022)

Office Automation — Aptech (2021)

LANGUAGES

English (Professional Proficiency) | Urdu (Native)