

# LAXMIKANT NISHAD

Leeds, UK

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## Summary

Applied AI/ML Engineer (MSc Artificial Intelligence) specializing in **large language models (LLMs)**, **Transformers**, and **multi-modal** systems. Built **end-to-end healthcare LLM** applications: **data curation**, **fine-tuning (QLoRA)**, **prompt engineering**, **evaluation with clinicians**, and **deployment packaging** (Docker, llama.cpp for offline inference). Designed **evaluation pipelines**, regression testing, and **safety/hallucination** checks; delivered benchmark-beating Transformer models (**0.350 macro-F1**) without personalization. Tech keywords: **PyTorch**, **Hugging Face** **Transformers/PEFT/Accelerate**, **bitsandbytes**, **RAG**, **JSON-structured outputs**, **DINOv2**, **ViT**, **OpenFace**. Seeking to build **production-ready, trustworthy LLM** systems at Big Tech scale.

## Education

Sheffield Hallam University

MSc in Artificial Intelligence

2025 – 2026

Sheffield, UK

Ufa University of Science and Technology

BSc in Information Technology and Mathematics (Distinction, GPA: 4.77/5)

Sep 2019 – Jul 2023

Sterlitamak, Russia

## Experience

Applied AI/LLM Engineer (Clinical Narratives Platform)

Sheffield Hallam University

Jun 2025 – Present

Sheffield, UK

- Built an **end-to-end healthcare LLM** system: **synthetic data generation**, **fine-tuning**, **prompt & context engineering**, **clinician evaluation**, and **deployment pipeline**.
- Created **600 structured clinical profiles** with **Gemini 1.5 Pro** (teacher); **validated directly by medical doctors** for fidelity and usefulness.
- Fine-tuned **Llama 3 8B Instruct** with **QLoRA** on A100 GPUs (**8192-token** context) for **schema-faithful JSON outputs** used in **EHR/RAG** workflows.
- Integrated the model into a working **website interface** (deployment paused due to **clinical data restrictions**).
- Focused on **LLM evaluation**, **regression tests**, **safety/hallucination** reduction, and **structured-output compliance**.

AI Researcher — Multi-modal Transformers

Sheffield Hallam University

Feb 2025 – Aug 2025

Sheffield, UK

- Designed a **hybrid Conv1D + Transformer** sequence model fusing **DINOv2** image embeddings with **MediaPipe** features.
- Implemented **normalization**, **EMA**, **threshold calibration**, and light **TTA** for robust evaluation.
- Achieved **0.350 macro-F1** and **53.4% accuracy** on a 7-class, 2,152-sample dataset; **outperformed ATL-BP baseline** (~0.25 F1) and **personalized model** (0.308 F1) *without* per-user adaptation.
- Compared **unimodal vs multi-modal** pipelines (**ViT-FER**, **DINOv2**, **OpenFace**); authored recommendations for next-step modalities.

Junior Developer Intern

Tan Theta Software Studio

Oct 2023 – Dec 2023

Surat, India

- Built **SQL schemas** and **automated data pipelines** for a blockchain app; implemented **web scraping** for data ingestion.

Industry Collaboration Coordinator

Ufa University of Science and Technology

Jan 2022 – Jun 2022

Sterlitamak, Russia

- Secured **5+** industry-led projects; managed partnerships from outreach to kickoff, aligning academic and industry goals.

## Selected Projects

fMRI-Based Image Reconstruction (GANs) | PyTorch, StyleGAN2, U-Net, PatchGAN

2025

- Benchmarked GANs on Algonauts 2023; achieved stable training with **U-Net + PatchGAN + LSGAN**; analyzed domain mismatch/instability.

Object-Tracking Drone Navigation | Python, OpenCV, Sensor Fusion

2025

- Built real-time drone pursuit with PID control; v2 added **GPS + vision fusion** for robustness.

## Technical Skills

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**LLMs & NLP:** Llama 3 8B, Gemini 1.5 Pro, **Transformers**, **Hugging Face**, **prompt engineering**, **fine-tuning (QLoRA)**, long-context, **JSON outputs**, **RAG integration**  
**ML/AI:** **PyTorch**, PEFT, Accelerate, bitsandbytes, **evaluation pipelines**, calibration, **regression testing**, **multi-modal fusion**, GANs  
**Computer Vision:** **DINOv2**, ViT/ViT-FER, MediaPipe, OpenFace, OpenCV, real-time tracking  
**Deployment:** **Docker**, `llama.cpp` (offline inference), CUDA, Git, Linux  
**Programming:** Python, SQL, JavaScript

## Certifications

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- DeepLearning.AI: Neural Networks & Deep Learning (2023)
- DeepLearning.AI: Improving Deep Neural Networks (2023)
- DeepLearning.AI: Convolutional Neural Networks (2023)
- Kaggle: Intro to ML; Intermediate ML; Data Visualization
- 365 Data Science Bootcamp (2022)
- MongoDB: M001 Basics (2021)

## Leadership / Extracurricular

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**AI Club, Computer Science Club, Coffee Club, Physics Discussions**

**2023 – Present**

*Member*

*Sheffield Hallam University*

– Organised technical talks, coding challenges, and research paper discussions; promoted faculty–student collaboration.

### Honors & Awards

- **Transform Together Scholarship** — academic excellence and leadership potential.
- **Academic Excellence Award (Distinction)** — top performance in BSc IT & Mathematics.