Purusharth Malik

+919084356064 | purusharth19malik@gmail.com | LinkedIn | GitHub | Blog

EDUCATION

CHRIST (Deemed to be University) — Bangalore, Karnataka
Master of Sciences (Artificial Intelligence and Machine Learning), 3.92/4.0 — *July 2023 – May 2025*

University of Delhi — New Delhi
Bachelor of Science, Honours in Mathematics, 8.27/10.0 — *August 2019 – May 2022*

EXPERIENCE

AI Engineer — June 2025 – Present
Swiggy — *Bangalore, Karnataka*
- Technology Stack - Python, LangChain, LangGraph, PyTorch, HuggingFace
- Working on building AI functionalities at CREW
- Creating a custom evaluation framework for customer-facing LLMs

Software Engineer - Artificial Intelligence — Feburary 2025 – May 2025
Metrum AI — *Bangalore, Karnataka*
- Technology Stack - Python, PyTorch, Docker, LangGraph, AWS, LangChain, HuggingFace
- Worked with AMD and Dell to create AI applications to showcase hardware capabilities
- Worked with Stable Diffusion to create digital avatar plug-ins for different modules

Machine Learning Engineer — October 2024 – January 2025
SMOOR Chocolates — *Bangalore, Karnataka*
- Technology Stack - Python, AWS, HuggingFace, PyTorch
- Worked with the finance team to automate inventory management pan India
- Worked on an agentic framework to improve the customer service pipeline

Data Scientist — August 2024 – October 2024
NayaOne — *Remote, London*
- Technology Stack - Python, PyTorch, HuggingFace, AWS EC2, Docker, Kubernetes, CrewAI
- Provided automation for sales and marketing teams
- Created multi-agent systems to perform trend analysis

LLM Engineer — May 2024 – August 2024
Iolite Technologies — *Bangalore, Karnataka*
- Technology Stack - Python, PyTorch, HuggingFace, Flask, AWS EC2, React.js
- Created an LLM-driven chatbot for the university's ERP system
- Finetuned multiple pre-trained LLMs after performing quantization using LoRA

PROJECTS

Swin-VQA | *Python, PyTorch, Transformers, OpenCV, Pillow* — Source Code
- Created a visual question-answering system for assistance in the field of radiology.
- Used CLIP for visual encoding and a fine-tuned Llama-2 model for text encoding.
- Created custom decoder layers inspired by DeiT and Swin Transformers.

AutoQuote | *Python, PyTorch, LangChain, MongoDB, Flask, JavaScript, HTML, CSS, Pinecone* — Source Code
- A web application that is able to automate the process of generating quotations for high-end hotel chains.
- Integrated language models with MongoDB and Vector DB to generate a quoted bill-of-quantity in the form of an Excel document.
- The project is in collaboration with Shanti Metal Industries and is currently in production.

TECHNICAL SKILLS

Python, PyTorch, Tensorflow, LangChain, LlamaIndex, LangGraph, HuggingFace, Statistical Machine Learning, Deep Learning, MongoDB, MySQL, Redis, MATLAB, AWS, Milvus, Pinecone, vLLM, TensorRT, Linear Algebra, Computational Mathematics, Problem Solving, Probability & Statistics