Dhruv Saxena

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PROFILE

AI/ML engineer with hands-on experience across machine learning, deep learning, NLP, and generative AI. I build end-to-end solutions—from data pipelines and model development to evaluation, MLOps, and cloud deployment—using Python, PyTorch/TensorFlow, and modern LLM tooling (Transformers, LangChain/LangGraph, RAG/agents). Known for clear problem framing, rigorous debugging and optimization, and delivering reliable, scalable systems.

EDUCATION

MSc Artificial Intelligence and Robotics, University of Hertfordshire, Hatfield, UK

Bachelor of Technology in Computer Science and Engineering, Lovely Professional University, Punjab, India

TECHNICAL SKILLS

Languages:	Python
Developer Tools:	Visual Studio Code, Git, Google Colab
Databases:	MySQL, MongoDB
Technical Skills:	Machine Learning, Deep Learning, Natural Language Processing (NLP), TensorFlow, Keras, PyTorch, Computer Vision, CNN, LSTM, RNN, GANs, Large Language Models (LLMs), Transformers, BERT, GPT, RAG, Agentic RAGs, AI Agents, Generative AI, Rest APIs (Fast API)
Frameworks:	Hugging Face, LangChain, LangGraph, CrewAI
Cloud:	AWS (S3, ECR, EC2, EKS, Fargate)
MLOps Tools:	Docker, MLflow, Kafka, GitHub Actions, DVC, Airflow
Soft Skills:	Communication, Motivation, Problem Solving, Teamwork, Time Management, Decision Making, Management, Leadership, Computer Literacy

PROFESSIONAL EXPERIENCE

Data Science / Generative AI Intern — August 2024 – Present
Zep Analytics, Remote

- Leading a team of data scientists in the field of Generative AI.
- Developing and optimizing Generative AI applications and pipelines.
- Refactoring code into object-oriented structures for scalability.
- Building and deploying LLMOps-based applications on cloud platforms.
- Working with frameworks such as LangChain, vector databases, OpenAI, Gemini, AI agents, and RAG pipelines.

Machine Learning Intern — May 2024 – August 2024
iNeuron.ai, Remote

- Built predictive models for Health Insurance data using machine learning.

- Designed and implemented MLOps pipelines for model deployment.

- Created a Flask-based web app to estimate health insurance costs for end users.

- CI/CD workflows implemented using GitHub Actions and deployed on AWS EC2.

PROJECTS

Network Security using Machine Learning

Tech: Python, Machine Learning, Apache Airflow, Github Actions, Terraform, Docker and AWS.
- Developed **MLOps** pipeline from scratch, for training and predicting whether the website is phishing or not.
- Worked on integrating and setting up **ML Flow** to track experiments and for model versioning.
- Implemented **Apache Airflow** for scheduling and managing data pipelines and workflows.
- Manage the project infrastructure using **Terraform**.

Chest Disease Classification

Tech: Python, Deep Learning, opencv, Transfer Learning model VGG16, ML Flow, Github Actions, dvc, Docker and AWS.
- Designed and developed a web app to detect input CT scan image is benign or malignant.
- Worked on transfer learning technique i.e. VGG16 model for image classification.
- Introduced and implemented MLOps methodology along with MLFlow and dvc.
- Implemented CI/CD using GitHub actions and deployed the web application on App services on AWS cloud.

MLOps Pipeline Standardisation

- Implemented a standardised machine learning pipeline with 5 components to streamline future projects
- The pipeline includes data ingestion, data transformation, data validation, data evaluation, and model training and deployment.
- Stored processed data in MongoDB for quick and effective access, increasing data retrieval efficiency
- Securely stored pipeline artifacts in an S3 bucket for reliable retrieval and protection against data loss.

ACHIEVEMENTS

2nd Place – AI Innovation Challenge

2nd Place, University Agentic AI Competition (2025) — Built "Trip Itinerary Planner," an AI travel assistant using LangGraph, LangChain and Custom Tools for real-time trip planning.

Community Session on YouTube

Taking live community sessions on YouTube for Generative AI, Machine Learning, Deep Learning, MLOps, and LLMOps.

Simplilearn / Trainee

Successfully completed a 6-month training program in Artificial Intelligence Engineering, fulfilling all mandated course requirements and industry projects with distinction.