

Varun Dixit

Email: varundixit4@gmail.com | Phone: +919673375005

[Linkedin](#) | [Portfolio](#) | [Github](#)

SKILLS:

Generative AI: Large Language Models (LLMs), Fine-Tuning, LangChain, LlamaIndex, Retrieval-Augmented Generation (RAG), AI Agents, Document AI, Prompt Engineering, HuggingFace, Azure AI Studio.

Machine Learning/Deep Learning: Scikit-Learn, PyTorch, ML Models, Hyperparameter Tuning, Feature Engineering, Model Evaluation, Natural Language Processing, Computer Vision.

Data Analytics: Exploratory Data Analysis (EDA), Numpy, Pandas, Matplotlib, Seaborn, PowerBI, Tableau.

Languages and Databases: Python, SQL, C++, PostgreSQL, Milvus.

Cloud and MLOps: MLFlow, Azure DevOps, Docker, Kubernetes, FastAPI, Git.

EXPERIENCE:

JIO Platforms Limited, Mumbai

December 2023 - Present

Role: Associate Data Scientist; Team: Analytics COE

- Designed and deployed AI-driven solutions using **Generative AI** to optimise processes and enhance decision making for the Refining and Marketing (R&M) **Strategy** and **IT** teams of **Reliance Oil to Chemical (O2C)** division.
- Developed an **Oil Market Report (OMR) Summariser** that automated the summarization of **50-80 page reports**, reducing the time required by an analyst from **8 hours to 6 minutes** to generate the summary.
- Implemented a **Retrieval-Augmented Generation (RAG)** chatbot to answer queries and analyse trends across monthly OMR reports, reducing manual skimming by providing results in **6-7 seconds per query**. Also, made a **custom PDF parser** to enhance data accuracy, reducing hallucinations by **80%** compared to generic parsers.
- Created a **Web Scraper Tool** to convert **HTML tables** from the provided URL into **JSON** for dataset creation. Also, worked on a **News Summariser** to summarise articles from the Argus News API, replicating the API while preserving tables and images, to be put on the **O2C's internal website**.
- Built an **AI based Agreement Generator** for drafting legal terms and integrated **semantic search** for retrieval of text from previously created agreements.
- Participated in **LLM fine-tuning**, inference optimization, and **Modular RAG implementation** experimentations, and worked on in-house projects like HR Chatbot and SQL query generation tool, advancing organisational AI capabilities.

PROJECTS:

Traffic Sign Recognition and Classification

- Built a traffic sign recognition and classification model using Darknet and YOLO v3 for detection and CNN for classification.
- Implemented YOLO to locate signs in video frames and CNN to classify them among 21 classes, showcasing proficiency in computer vision and deep learning.

Fake Faces Generation using GAN

- Designed a GAN model for the Artificial Intelligence course in semester 7, demonstrating deep learning proficiency.
- Implemented Generator and Discriminator networks to generate synthetic data, enhancing practical understanding of GANs.

EDUCATION:

K. J. Somaiya Institute of Technology, Mumbai

August 2019 - June 2023

Bachelors of Technology (B.Tech) in Electronics and Telecommunications Engineering

- GPA: 8.69/10
- Coursework: Machine Learning, Fundamentals of Data Science, Artificial Intelligence, Neural Networks and Deep Learning, Image Processing and Machine Vision, Data Structures and Algorithms, Database Management System.

EXTRA-CURRICULAR ACTIVITIES:

IEEE Students' Chapter KJSIT

July 2022 - May 2023

- As the Chairperson, led a team of 80+, managed the tech fest 'Renaissance' attracting 1000+ students, and organised over 10 workshops and seminars.

Students' Council KJSIT

January 2022 - December 2022

- As the CEO, led a team of 150 students to organise the cultural festival 'Surge' and sports festival 'Score', managed digital media, and documented all events.

CERTIFICATIONS:

Fellowship Program in Software Engineering with Specialisation in Data Science

- Scaler Academy - October 2021 to October 2022
- Intensive 12-month program with advanced topics in data structures and algorithms, alongside practical training in data science and machine learning.

Google Data Analytics Specialization

- Coursera - October 2023