# Amit Choubey

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#### Education

## UNIVERSITY OF LIVERPOOL

Liverpool, UK

MSc. in Data Science & AI, Distinction

September 2024

Relevant Coursework: Python Programming, Maths & Statistics, Database & Information System, Research Methods, Applied AI, Computational Intelligence, Data Mining & Visualisation, ML & Bio-Inspired Optimisation.

# SRM INSTITUTE OF SCIENCE & TECHNOLOGY

Chennai, IND

B. Tech in Electronics & Instrumentation Engineering, First-Class Honours

June 2014

Relevant Coursework: Mathematics III, Neural Networks, Matlab, Modern Control System, DSP.

Final Year Project Appreciation by NIEPMD & HAL.

# Technical Skills & Projects

Programming: Python, Flask, Django, SQL, MongoDB, JavaScript, Node.js, Git-Action, CI/CD Pipeline.

Markup-language: HTML, Overleaf, Latex.

Data-Science: Matplotlib, Seaborn, Pandas, Numpy, Power BI, Tableau, Shiny, NLP, Open Source LLm, Hugging-Face.

Framework: Scikit-learn, Pytorch, Keras, Tensor-flow, RAG, LangChain, LlamaIndex, OpenAI API, GGplot.

Cloud: AWS S3, EC2, Sagemaker, RedShift, DynamoDB, Database, Billing.

General Purpose: MS Excel, MS365, MS Power BI, Prompt, Slack, Web Scrape, Gradio, Streamlit, SPSS.

Additional: DSA, System Design, ML-System Design, Data Pipeline, Kubernetes.

## COMP702 MSc Dissertation

Developed a Long-Form Q&A NLP tool for the finance domain using a Retrieval-Generation Pipeline (RAG). Conducted experiments with 4 retriever models and 6 open-source generative models to determine the optimal combination, and currently presenting findings in a research paper.

## EI0444 B.Tech Project-Work

Developed a Voice-Controlled Smart Environment system to assist individuals with mobility challenges as part of my final year project (Speech Recognition).

# Relevant Experience

FREELANCE

Bengaluru, IND

GenAl Engineer

December 2022 - July 2023

• Spearheaded the design of personalized learning tools for SEND children, including spelling and vocabulary apps powered by advanced LLMs, optimizing educational content delivery and fostering targeted learning outcomes tailored to individual needs.

BYJU'S Bengaluru, IND

ML Engineer - Learning & Personalisation

February 2022 – December 2022

- Designed AI-driven tools for content classification, feedback, and academic tracking, enhancing platforms like AssesEd.
- Built knowledge graphs, concept maps, and ML workflows for JEE, NEET, and K-10, improving content optimization.

# Leadership & Teaching

- Marketing Campaign Lead: Boosted CORNER HOUSE membership by 20 % through a targeted marketing initiative.
- Event Organizer: Managed EIEIA-13 Fest logistics, increasing student participation and sponsorship.
- Physics Faculty (Allen Career Institute): Taught 5,000+ students over 6 years using data-driven methods, established new centres, and enhanced student enrolment.
- Volunteer Educator-Part time (UK): Taught Physics and Maths in Liverpool & London as part of a social giveback, supporting under-represented & SEND students with tailored lessons.

## Certifications

- AWS Certified AI Practitioner (AIF-C01)
- AWS Certified Cloud Practitioner (CLF-C02)
- UoL Health Tech Hackathon