

SACHIN

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SUMMARY

Data professional with **4.5+ years** of experience across Data Engineering, Data Science, Data Analysis, and Database Administration roles, backed by an MS in Big Data Analytics. **Specialized in AI Engineering** with hands-on expertise in **RAG, LLMOps, Fine-Tuning, and Agentic AI**. Proficient in **Machine Learning, Deep Learning, Natural Language Processing, Large Language Models, and Generative AI**. Known as a **researcher, problem solver**, and a **from-scratch learner** who thrives on building impactful solutions. Actively seeking AI Engineer roles with **full right to work in the UK**.

PROJECTS

Medical Case Analysis RAG System with Evaluation (Dissertation) Sep. 2024-Dec. 2024

- Built a **domain-specific RAG system** from scratch for **medical case analysis**, replacing general models with **Bio_ClinicalBERT** for semantic retrieval via **FAISS** and **MedLlama-3-8B** for generation, enabling fast, **GPU-accelerated** diagnosis support on **NHS-format case data**.
- Evaluated** system performance against general-purpose models, with **69% higher avg. similarity** and significant **BLEU (+251%)** and **ROUGE-1,2,L (+32%/+36%/18%)** improvements, leading to **fewer hallucinations and more accurate clinical outputs**.

Web Social Media Analytics Using NLP and Graph Network Analysis Jan.2024-May 2024

- Performed large-scale analysis of **500K+ tweets** using NLP techniques to track **sentiment trends and misinformation**, applying **topic modeling (LDA/LSI)** and **graph network** analysis with Python (NLTK, TextBlob, Gensim, NetworkX).
- Trained sentiment classifiers (**Logistic Regression: 96.8%, SVM: 96.9%, LSTM: 93.9%**) and used **graph centrality metrics** to identify key influencers behind cross-community content spread, visualized networks to expose high-impact nodes and potential misinformation clusters.

WORK EXPERIENCE

Prestige Windows | Data Engineer, Sheffield, UK Aug. 2024-Nov. 2024

- Built an automated data pipeline using **Python** and **Power Platform** to extract sales data from **500+ PDFs** and **3 websites**, cutting manual effort, and increased revenue by **15%**.
- Created **Power BI** dashboards using **DAX** measures and dynamic filters to visualize product-level sales trends, enabling targeted strategy execution that increased sales by **40%** and empowered real-time, data-driven business decisions.

Q3 Technologies | Software Engineer (Data & BI), Gurugram, India Jan. 2022- Jan. 2024

- Built a **RAG-based AI chatbot** to extract insights from project documents and research papers, cutting manual lookup by **35%** and improving requirement clarity in IT and scientific decisions in the chemical industry.
- Engineered an **AI-driven tender automation** system using **RPA, OCR, and a RAG-based LLM chatbot** to extract, categorize, and query documents, automating **80%** of manual work and enabling **5x** more daily applications to increase coverage and competitiveness.
- Enabled **OpenAI-MySQL** integration for natural language sales queries on **50K+** records/month, reducing query time by **60%** for non-technical jewellery client.
- Developed a **sentiment and topic modeling** system (**SVM, TF-IDF, LDA, preprocessing**) for a quick-commerce client to flag delivery-related issues, achieving **83%** accuracy and helping CX and product teams improve user experience.
- Led a scalable web application for south Korean electronics firm with **140+ SQL procedures and ETL pipelines for 1M records**, cutting processing time by **90%** and Streamlining workflows to enable swift decision-making within the finance and accounts team.

iNeuron.ai | Data Analyst Project Intern, Bangalore, India Aug. 2021-Nov. 2021

- Analysed **300+** patient records, creating **22+ Python** visualizations and a **Power BI** dashboard, improving diagnostic **decision-making**.
- Created High/Low level designs, architecture, and wireframes to define analysis flow, reducing rework by **25%**.

Goalwit Technologies | Software Engineer, Delhi, India Aug. 2018-Dec. 2020

- Architected **end-to-end SQL database** for matrimony product including schema design, indexing strategies, and stored procedures in collaboration with backend developers, improved query speed by **70%** and enabled scalable performance as user base grew **5x**.
- Designed and executed **ETL pipelines in SQL and Python** to cleanse, transform, and integrate multi-source user data, improving CRM accuracy by **40%** and driving efficient lead segmentation.
- Engineered a **rule-based matchmaking system** using **SQL and Python** to filter profiles based on demographic, religious, and behavioral preferences, reduced mismatch complaints by **27%** and boosted successful pairings, directly increasing match-to-sale conversions.
- Built a **logistic regression** model to **score user engagement** during onboarding based on behavior signals like field skip rate and time spent, identified high-risk drop-offs, optimized form UX, and increased profile completion by **23%**.
- Applied NLP techniques like **TF-IDF and cosine similarity** using **Python** to analyze user bios and interests, increasing match relevance by **53%** and boosting engagement on suggested profiles in the matrimony workflow.

SKILLS & LANGUAGES

Programming Languages: SQL, SparkSQL, NoSQL, CQL, DAX, Python, PySpark

Data Tools & Platforms: SQL Server, MySQL, SSIS, Databricks, Power BI, Neo4j, Google Colab, MongoDB, Visual Studio, Docker, Cursor

Libraries & Framework: Pandas, NumPy, Scikit-learn, XGBoost, TensorFlow, PyTorch, Kera, NLTK, SpaCy, Gensim, Pydantic

GenAI: OpenAI, Llama, Gemini, Mistral, Hugging Face, LangChain, LangGraph, Langflow, Ollama, FastAPI, Streamlit, Groq, Pinecone, FAISS, CrewAI

Cloud: AWS (ECR, Bedrock, SageMaker, S3)

DevOps & Version Control: CI/CD & Git

EDUCATION

• **Birmingham City University** | *Masters of Science in Big Data Analytics (Distinction)* | Birmingham, UK Jan. 2024-Jan. 2025

• **Jamia Hamdard** | *Bachelors of Engineering in Electronics & Communication (Merit)* | Delhi, India Aug.2014-Aug. 2018