RAHUL SHARMA

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Summary

Data Scientist (4 yrs) delivering end-to-end, production-grade AI solutions and insights for business growth. Skilled in advanced analytics, statistical modeling, ML/DL, LLM fine-tuning, RAG, and deploying models with Python, SQL, and cloud tools.

Education

University of Maryland - College Park, US   May 2026
Master of Science in Data Science - (GPA: 4.0/4.0)
- Relevant Courses: Probability & Statistics, Machine Learning, Principle of Data Science, Algorithms, Data Modelling & Representation, Big-Data Systems.

Indian Institute of Technology (BHU) Varanasi, India   July 2020
Bachelor of Technology in Engineering
- Relevant Courses: Eng. Mathematics, Computer Programming, Numerical Methods, Applied Mathematics.

Work Experiences

Jet2 Travel Technology, *Pune, India*   June 2022 - Aug 2024
Data Scientist
- Processed 1 M+ call transcripts; built **supervised classification** with finetuned LLMs using few-shot transfer learning, hitting **88% Jaccard recall** and enabling real-time decision-making in contact-centre ops.
- Implemented **unsupervised topic-clustering** and anomaly detection pipelines; identified disaster patterns at **92% specificity** and translated findings into prescriptive playbooks for operational leaders.
- Deployed **LSTM/GRU** models with walk-forward validation in Dataiku, scheduling automated jobs and alerts; ensured data integrity with Pydantic and sustained **<2% model drift** through continuous monitoring, integrating **Tableau** for insights.

Fibe (Formerly EarlySalary), *Pune, India*   Sept 2021 - June 2022
Data Scientist
- Led feature-engineering & scorecard modelling on 1000+ bureau vars; lifted **ROC-AUC to 0.94** and produced **storytelling decks** that drove credit-policy change.
- Automated Python scripts with Knime, added **AI-governance checks** (data integrity, security), shrinking turnaround **15x**.

Advanced Technology Consulting Service, *Jaipur, India*   Nov 2020 - Sept 2021
Associate Data Scientist
- Streamlined PySpark to MSSQL ETL pipeline, integrating data quality validation prior to analytics.
- Trained Mask R-CNN deep-learning transfer model in **TensorFlow**; delivered to Azure blob storage for production inference, achieving 85 % mAP.

Axio (Formerly CapitalFloat), *Bangalore, India*   May 2020 - Nov 2020
Research Intern
- Built address dataset, applied **clustering & statistical evaluation,** achieving 95 % F1, and informed fraud-risk strategy.
- Designed OCF metrics and developed **Power BI storytelling dashboards,** translating analytics to non-tech executives.

Projects

- **Multimodal E-commerce Recommendation System, Fall'24, UMCP:** Fine-tuned **CLIP vision** and text encoders with BLIP-generated captions and segmentation masks to enhance text-image alignment. Integrated adaptive query reweighting and **FAISS retrieval**, achieving 88% Mean Opinion Score against human ground truth; deployed **AWS SageMaker** endpoint; code in Git ; (**paper in review**)
- **SkillSpring, Self Project, Summer'25:** Built an end-to-end learning platform with a PDF→embeddings pipeline (Cohere) for similarity search, LLM summaries/flashcards/quizzes, and a chatbot with framework-detection + adjustable explanation levels. Added ONET/BLS-based career matching (cosine similarity) and a progress dashboard; shipped with CI/CD and deployed web on Vercel and services on Railway. Demo: here

Skills

- **Programming:** Python (Adv.), SQL (Adv.), PySpark (Int.), C/C++ (Int.), MATLAB (Int.)
- **Frameworks:** TensorFlow, PyTorch, Transformers, OpenCV, Statsmodels, Langchain, LangGraph, MCP, FastAPI
- **Databases:** MS SQL Server, MySQL, Snowflake, Redshift, Hadoop, Spark, Supabase, Neo4j, pgvector
- **Tools:** AWS, GCP, Azure, Dataiku, Knime, Git, Databricks, Docker, Tableau, Power BI, Vercel, Railway, GitHub Actions
- **Specializations:** LLMs, GenAI, RAG, Deep Learning, ML, Model Development & Deployment (CI/CD, MLOps), Clustering, Anomaly Detection,
- **Soft Skills:** Communication, Storytelling, Stakeholder Collaboration, Problem Solving, Ownership, Agile MVP Mindset

Extracurricular Achievements

- **Bronze – 800 m & Football** (Inter-IIT) • **Volunteer maths/science tutor** (150 h) • **Team of the year** (Jet2)