Sankaran S

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Professional Summary

Junior Data Scientist with 1.5+ years of proven experience building production-ready ML systems, RAG applications, and computer vision solutions. Demonstrated expertise in delivering 90%+ accuracy models and automated document-processing pipelines solving real business problems across multiple industries. Successfully completed 20+ end-to-end data science projects from concept to deployment, with strong proficiency in Python, SQL, machine learning, and modern AI frameworks. Seeking to contribute advanced analytics and automated ML solutions to drive data-driven decision making.

Technical Skills

Programming: Python (Advanced), SQL (PostgreSQL, MySQL), JavaScript, HTML/CSS

Machine Learning: Scikit learn, XCBoost, Random Forest, SVM, Linear/Polynomial Regression

Machine Learning: Scikit-learn, XGBoost, Random Forest, SVM, Linear/Polynomial Regression, Decision Trees, K-NN

AI & Deep Learning: NLP, Computer Vision, YOLO, OpenCV, PyTorch(Basics)

Advanced AI: LangChain, RAG Systems, HuggingFace, FAISS, Chroma, Vector DB, OpenAI API Analytics & Visualization: Power BI, Advanced Excel, Pandas, NumPy, Matplotlib, Seaborn, Plotly Tools & Platforms: Streamlit, Gradio, Docker, Git, Flask, FastAPI, Linux, ETL Pipelines

Work Experience

Junior Data Scientist, F & R Data Analytical System & Solutions Pvt. Ltd. Jan 2024 – May 2025

- Developed computer vision models for brand logo detection achieving **92% accuracy**, processing **100K+ images weekly** using Python, OpenCV, and deep learning frameworks
- Built automated receipt extraction system handling 5,000+ documents daily, reducing manual processing time by 75% using Python and OCR technologies
- Performed comprehensive data labeling and annotation for 50+ brand categories, improving model training efficiency by 40% through optimized workflows
- Collaborated with analytics team to deliver comprehensive reports, increasing client satisfaction by 30% through reliable automation and real-time processing systems

Data Analyst Intern, Nobeth Analytics

 $Jul\ 2023 - Dec\ 2023$

- Developed telecom customer churn prediction model achieving 85% accuracy on 100,000+ customer records using Python and scikit-learn
- Created interactive Power BI dashboards reducing report generation time from 8 hours to 2 hours weekly through automated data visualization
- Identified key churn factors through statistical analysis, resulting in 15% improvement in customer retention strategies and comprehensive data pipeline development
- Built automated reporting systems processing **500K+ row datasets** using SQL optimization techniques for real-time business intelligence

SmartPDF AI-RAG System

GitHub

- Built AI-powered document Q&A system with LangChain & HuggingFace integration for advanced document intelligence
- Implemented context-aware responses using PDF processing, vector embeddings, and memory-enhanced conversations with FAISS vector database

Brand Logo Detection & Position Analysis

GitHub

- Developed custom-trained detection model for brand logo identification with 92% accuracy and position analysis with coordinate mapping
- Built real-time processing system for marketing analytics applications with confidence scoring for brand monitoring and competitive analysis

Machine Learning & Analytics Suite

- Created comprehensive ML models: IPL Score Predictor, Coffee Shop Revenue Predictor, Diabetes Risk Predictor achieving 80-85% accuracy
- Developed recommendation systems (movie & book engines) with content-based filtering, collaborative filtering, and OMDB API integration

Advanced Power BI Dashboard Collection

- Built professional dashboards: Data Professional Survey (500+ professionals), E-commerce Sales Analytics, Healthcare Analytics, Employee Attrition Analysis
- Conducted large-scale data analysis: US Traffic Accidents (2016-2023), NYC Airbnb Market Analysis, Global Layoffs SQL Analysis (2020-2023)

Education

B.Tech Mechanical Engineering, Kalasalingam Academy of Research & Education 2019 - 2023 Strong foundation in applied mathematics, statistics, and analytical problem-solving. Developed technical skills in data analysis and computational methods with projects involving statistical modeling and engineering analytics.

Certifications

IBM Data Analyst Professional Certificate (June 2025)

View Certificate

11 comprehensive courses: Introduction to Data Analytics, Python for Data Science AI & Development, Data Analysis with Python, Data Visualization with Python, SQL for Data Science, IBM Data Analyst Capstone Project

Python for Data Science – Simplifearn (2024)

SQL Basic & Intermediate – HackerRank (2024)

SAP Certified Application Associate – Procurement with SAP ERP 6.0 EhP7