Sachin Loddiya Karthik

517-243-9938 sachinlkece@gmail.com Sachin GitHub Portfolio USA — Open to relocation

SUMMARY

AI/ML Engineer with 3+ years of experience building end-to-end data solutions and deploying production **LLM applications**. Reduced manual processes by up to **85%** through automated AI solutions using Python and cloud platforms. Proficient in **Python, cloud platforms (Azure/AWS)**, and deploying **conversational AI systems** and **MLOps pipelines**.

TECHNICAL SKILLS

Machine Learning & AI: Scikit-Learn, XGBoost, TensorFlow, PyTorch, OpenCV, Keras, LangChain, FAISS, OpenAI API, Gemini
Programming Languages: Python, R, SQL (T-SQL, PL/SQL), Java, C++, HTML, CSS, JavaScript
Statistical Analysis: Regression (Linear/Logistic), ANOVA, Hypothesis Testing, Time Series, Clustering (K-Means, DBSCAN), PCA
Data Engineering: Apache Spark (PySpark), Apache Kafka, Apache Airflow, Databricks, Delta Lake, Docker, Kubernetes
Cloud Platforms: Azure (Data Factory, Synapse, ML Studio, DevOps), AWS (S3, EC2, Glue, Athena, SageMaker), GCP (BigQuery, Dataflow, Pub/Sub)
Databases & Querying: PostgreSQL, MySQL, MS SQL Server, Azure SQL, Oracle DB, NoSQL (MongoDB), SQLite
Visualization & BI Tools: Power BI, Tableau, Seaborn, Matplotlib, Plotly
MLOps & Development: Git, GitHub, MLflow, Streamlit, FastAPI, VS Code, Jupyter Notebook, RStudio, PyCharm

EXPERIENCE

AI Engineer Intern — Goodie Bag, USA **Jun 2025 - Present**

- Designed and deployed a stateful conversational AI using **FastAPI** to streamline **7+ customer support use cases** (e.g., closed store, food quality issues, cancellations), reducing manual ticket handling by an estimated **30%**.
- Built a high-performance, **non-blocking API** for the chatbot using **asyncpg** and **httpx**, enabling asynchronous integrations with the **Stripe** and **HubSpot** APIs for real-time refund processing and intelligent support ticket creation.
- Architected and built a Python-based performance reporting system that ingests **15+ data sources** to generate automated PDF reports with data visualizations using **Matplotlib** and **ReportLab**.
- Implemented a data driven business intelligence engine within the reporting tool that uses **statistical analysis** (quartile, trend, and variance analysis) to generate actionable recommendations for partners, such as identifying top-performing products to scale.

Data Scientist — WMU, USA **Jan 2025 – Apr 2025**

- Architected an automated class scheduling optimizer using **Google OR-Tools** and **constraint programming**, reducing manual scheduling time by **85%** and optimizing 200+ course assignments across 15 departments.
- Created and deployed a **Streamlit**-based tool to ingest and validate 50+ CSVs in real-time, cutting data entry errors by **90%** and saving over **40 hours/week** of manual effort.
- Applied **operations research** and **combinatorial optimization** techniques to improve academic scheduling efficiency.

Data Scientist — Green Expectations LLC, USA **Jan 2024 – Apr 2024**

- Spearheaded a rule-based **Home Sustainability Scoring model** to process **1,000+ user-level data points**, improving recommendation accuracy by **35%**.
- Enhanced performance of an **NLP-powered AI chatbot** by optimizing real-time data pipelines, reducing response latency by **40%** and boosting user engagement by **25%**.
- Led **feature engineering** and data preparation efforts for intelligent sustainability predictions across user profiles.

Data Engineer — Accenture, India **Jul 2021 – Jul 2023**

- Engineered ETL pipelines using **Azure Data Factory** to reformat supply chain data into **Parquet**, improving processing efficiency by **40%**.
- Processed raw supply chain data in **Azure Databricks** from **Data Lake Gen2**, boosting accuracy by **25%** and halving transformation times.
- Implemented external tables in **Azure SQL** and interactive **Power BI dashboards**, improving data access and increasing operational efficiency by **25%**.
- Integrated ADF triggers, Databricks notebooks, and CI/CD pipelines with **Azure DevOps**, accelerating delivery by **30%**.

Data Engineer — Claritrics India Pvt Ltd, India **Nov 2020 – May 2021**

- Scheduled an ETL pipeline using **Azure Data Factory** and **Databricks** to integrate OCR-extracted data, improving document processing accuracy by **30%**.
- Streamlined recurring workflows and enhanced reliability, reducing processing time by **40%**.
- Enabled quicker deployments by **30%** with modular coding practices and containerized environments.

EDUCATION

Master of Science in Data Science — Western Michigan University **Aug 2023 - Apr 2025**

GPA: 3.86/4.0 *Kalamazoo, MI*

- **Relevant Coursework:** Machine Learning, RDBMS, Azure Databricks & Spark (PySpark / SQL), Applied Linear Models, Big Data Analysis, Google Cloud Big Data & ML Fundamentals