

# SACHIN LODDIYA KARTHIK

☎ 517-243-9938 ✉ [sachinlkece@gmail.com](mailto:sachinlkece@gmail.com) [in sachin-lk/](#) [portfolio](#) 📍 [Open to relocation](#)

## SUMMARY

Highly skilled **Data Engineer** with 3+ years of experience driving efficiency through designing scalable data pipelines, optimizing ETL workflows, and delivering real-time analytics solutions. Proficient in **PySpark, SQL, Azure Databricks, and Synapse**, with demonstrated expertise in **data modeling** and **lakehouse architecture**. Committed to transforming complex raw data into actionable insights that empower business intelligence and strategic decision making.

## TECHNICAL SKILLS

**Data Engineering:** Apache Spark, Apache Kafka, Apache Airflow, Databricks, Docker  
**Cloud Platforms:** Azure (Data Factory, Synapse Analytics, DevOps), AWS (EC2, S3, Glue, Athena, Redshift), GCP (BigQuery, Pub/Sub, Dataflow)  
**Programming:** Python, R, T-SQL, Java, C, C++, HTML, CSS, JavaScript  
**Databases:** Azure SQL, Oracle SQL, MySQL, MS SQL Server, PostgreSQL  
**Visualization:** Power BI, Tableau  
**ML & Libraries:** Pandas, NumPy, Scikit-Learn, TensorFlow, PyTorch, OpenCV  
**Statistical Analysis:** ANOVA, Hypothesis Testing, Regression Analysis  
**Tools:** PyCharm, VS Code, Jupyter Notebook, R Studio, WinSCP, PuTTY, MS Office

## EXPERIENCE

### Data Engineer, WMU - USA

Jan 2025 – Apr 2025

- Designed an automated class scheduling solution 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 UI to process 50+ CSVs with real-time validation, reducing data input errors by **90%** and enabling interactive visualizations for 100+ faculty members.
- Reduced scheduling conflicts by **95%** and eliminated over **40 hours/week** of manual effort using optimization algorithms and an intuitive frontend.

### Data Engineer, Green Expectations LLC - USA

Jan 2024 – Apr 2024

- Built backend infrastructure for an AI-powered sustainability platform using a rule-based **House Sustainability Calculator**, processing **1,000+ data points/user** and improving recommendation accuracy by **35%**.
- Developed secure user authentication with persistent session storage, enabling **100% individualized access** for 500+ real-time users.
- Optimized data flows for an **NLP-based AI chatbot**, reducing latency by **40%** and increasing engagement by **25%**.

### 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.
- Developed 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 Limited - India

Nov 2020 – May 2021

- Built an ETL pipeline using **Azure Data Factory** and **Databricks** for an OCR solution, boosting text extraction accuracy by **30%**.
- Orchestrated end-to-end image processing workflows, reducing processing time by **40%**.
- Improved team efficiency by **20%** and accelerated project timelines by **30%** using **ADF triggers** and **Databricks job scheduling**.

## EDUCATION

### Master of Science in Data Science

Aug 2023 – Apr 2025

*Western Michigan University, Kalamazoo, Michigan*

*GPA: 3.86 / 4.00*

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