



Lakshmi Narayana M



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SUMMARY

Boasting **4 plus** years of experience across the **Software Development Life Cycle** in **technology, healthcare, insurance, and e-commerce** sectors. Spearheaded projects worth over **\$1M** and enhanced efficiency by **30%** utilizing Agile, analytics, ETL, and machine learning, in collaboration with teams of up to **25**.

WORK EXPERIENCE

Data Analyst, Capital One, United States

Feb 2024 – Present

- Enhanced **ETL** batch processing with **Spark**, achieving a **30%** improvement in data flow efficiency, vital for auditing and **compliance checks**.
- Spearheaded **Azure** migration, designing **database schemas** and optimizing **SQL** query performance by **20%** to enhance financial data processing.
- Engineered and deployed **Excel** and **Power BI** solutions to elevate data quality awareness by **25%**, facilitating strategic decision-making through sophisticated visual analytics.
- Executed complex data analyses using **SQL** and **Python** to develop predictive models, achieving **95%** forecasting accuracy to drive financial planning and resource allocation.
- Established and enforced rigorous data **security protocols**, achieving **100%** compliance with internal and external financial data management standards, and securing sensitive data across multiple platforms.

Technology Specialist, University of North Texas, United States

May 2023 - Dec 2023

- Amplified **Databricks**' data throughput by **20%**, leveraging **Apache Spark** and **Spark Streaming** for efficient **Snowflake** integration and **data lake** management.
- Engineered and augmented **ETL** pipelines utilizing **SQL**, **Python**, and **Scala** within **Azure Function App**, accelerating **FHIR** server healthcare data extraction rates by **25%** using **Apache Kafka** for data ingestion.
- Optimized database performance by incorporating **Azure SQL** and **SQLAlchemy**, achieving a **15%** reduction in **blob** storage costs and faster data insertion through streamlined **ELT** processes.
- Established **HIPAA-compliant Power BI** and **Power Apps** dashboards, elevating user engagement and productivity across healthcare data analytics by **20%**.

Technology Engagement Specialist, University of North Texas, United States

Nov 2022 - Apr 2023

- Spearheaded three **Python**-based data integration projects, boosting academic efficiency by **30%** through **dimensional modeling** and **OLAP** to **SQL** conversions.
- Assessed Student Feedback with **Tableau**, enriching satisfaction by **25%** through faculty development insights.
- Integrated **Git**-based **DevOps** to refine **CI/CD** processes, using **ELT/ETL** pipelines, elevating deployment efficiency by **20%**, and fostering team collaboration.

Application Engineer, Amazon, India

Mar 2019 – Jul 2022

- Pioneered a real-time anomaly detection system with **Amazon Glue** and **Redshift**, employing **Apache Spark Streaming**, slashing product damage identification times by **40%**.
- Analyzed exception data from **Global Robotic Fulfillment Centers** to identify critical patterns and provide actionable feedback for improving **machine learning models**, resulting in a **32%** reduction in defect transactions and a **19%** increase in stow rate through the implementation of a **computer vision model**.
- Implemented innovative solutions to enhance the **back-end stow** defect identification algorithm, leading to a significant improvement in confidence levels of the machine learning model and reducing defects at **FC's** by overwriting **ML stow resolutions**.
- Revamped **ETL** batch processing speed and efficiency by **30%** with **Spark**, optimizing data flow.
- Deployed **Amazon Athena** for comprehensive data querying, developing **QuickSight** dashboards that provided pivotal insights, and improving operational strategies.
- Streamlined data processing workflows with **Agile** methodologies, enhancing efficiency by **40%** and cutting error rates by **20%**, with oversight from **CloudWatch**.
- Leveraged **AWS** tools (**Databricks**, **EC2**, **S3**, **EMR**, **Lambda**, **RDS**) to accelerate data processing speeds by **30%**, using **Apache Kafka** for efficient data transport.
- Utilized advanced **Excel VBA** macros to automate and enhance data analytics processes, achieving a **20%** increase in reporting efficiency for strategic decision-making.

Jr. Data Engineer, Transol Systems Pvt. Ltd, India

Mar 2018 – Feb 2019

- Implemented **Spark** with **Python** for efficient data processing and **Azure Multi-Factor Authentication** for secure user authentication and deployment configurations.

- Explored various cloud offerings, including **Google Cloud Platform (GCP)**, in a proof-of-concept (POC).
- Utilized **Informatica Power Center** for diverse data loading tasks, including extracting raw data from **Microsoft Dynamics CRM**.
- Guided a development team on **PySpark** as an **ETL** platform, emphasizing efficient data processing.

TECHNICAL SKILLS

Languages/Scripting: Python (Pandas, Pyspark, NumPy, Scikit, Matplotlib), Spark, Scala, SQL, NoSQL, R, MATLAB

Technologies & Databases: Oracle, MySQL, SQL Server, NoSQL (MongoDB, Cassandra), PL/ SQL, SSMS

ETL/ Visualization: Talend, SSIS, Snowflake, Big Query, Informatica, Tableau, QuickSight, Power BI

Big Data/ Cloud: Databricks, Spark, Hive, Sqoop, Kafka, Hadoop, HDFS, MapReduce, Airflow, AWS - Glue, EC2, S3, Lambda, SageMaker, DynamoDB, Aurora, CloudFormation, Redshift, Azure - Synapse Analytics, Data Factory, Azure MySQL, Blob Storage, Azure Data Lake, EventHub, Databricks, Google Cloud Platform

Data Mining/ ML: Linear, logistic regression, Time Series, Decision Tree, Random Forest, K-NN, Clustering

Other: SAS, Unix, Terraform, Confluence, Visio, Access, Jenkins, GIT, JIRA, SPSS, Agile, Excel, A/B Testing

PROJECTS

Statistical Analysis using Python

- Analyzed **Kiva's** microfinance data to explore dynamics between borrowers and lenders, enhancing strategies for financial inclusion.

Sustainability Indicators Analysis through Data Visualization

- Developed a report on **global sustainability trends** correlating GDP with education and renewable energy, utilizing data visualization to depict challenges and progress.

University Library Analytics

- Leveraged **Power BI** to analyze and visualize the University Library System's operational data, including book circulation and visitor trends. Utilized **SQL** for data pre-processing and Power BI's advanced analytics for demand forecasting and resource allocation insights. This approach facilitated data-driven decision-making, significantly enhancing library service efficiency and user satisfaction.

Amazon Dislike Data Dashboard

- Led the development of a Dislike Data Dashboard to monitor and address **video feed quality** issues in Amazon's fulfillment centers. Applied **SQL** and **Python** for data analysis, managing trouble tickets based on user feedback, which directly contributed to improving the GO-AI team's operational efficiency.

Takt Time Analysis for Team Performance

- Implemented a project to analyze and optimize team performance by addressing takt time variability among Amazon operators using **SQL** and **Python** for data analysis. Machine learning models were developed to identify performance patterns, integrating **Agile** and **Lean Six Sigma** methodologies for continuous improvement. This led to enhanced operational efficiency of **12%** and reduced takt time discrepancies.

Airbnb Website Data Analysis

- Analyzed performance via **SQL** and **Tableau**, enhancing strategic decisions through effective data visualization and management.

EDUCATION

University of North Texas
Andhra University

MS in Information Systems & Technologies
BTech in Information Technology

Aug 2022 – Dec 2023
Aug 2014 – Sep 2018

CERTIFICATIONS & ACHIEVEMENTS

- **AWS** Certified **Solutions Architect- Associate** & Amazon **ACES** Certified **Lean Six Sigma Yellow Belt**.
- Microsoft Azure Certified **DevOps Expert (AZ-400)** & Microsoft Azure Certified Administrator Associate (**AZ-104**).
- **Quality Checker- Gold**~ December 2021 & **Champion Auditor**~ July 2021.