

# Sai Bhargav Yerramsetty

## DATA ENGINEER

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### SUMMARY

- With over 4 years of practical experience as Data Engineer, specialized in crafting, developing, implementing, and optimizing data architectures to enhance decision-making, with a focus on the Financial and Healthcare sectors.
- Proficient in harnessing the power of cloud technologies (Microsoft Azure, AWS) and Big Data tools (Apache Spark, Hadoop) to streamline data integration and processing.
- Well-versed in a variety of data technologies, including SQL, Python, and R, with hands-on expertise in data modeling, ETL processes, and proficient database management.
- Proficiency in data governance, data quality, and ETL/ELT process innovation and management.
- Familiar with big data technologies such as Hadoop, MapReduce, HDFS, Sqoop, Hive, NIFI, Kafka, and Apache Spark, enabling large-scale data processing.
- Skilled in the management and processing of extensive datasets using databases like MySQL, PostgreSQL, MongoDB, Oracle T-SQL, and SQL Server.
- Experienced in utilizing visualization tools such as Tableau and Power BI to craft insightful data visualizations and dynamic dashboards.
- Proficient in Jira and agile methodologies for delivering projects efficiently.

### SKILLS

<b>Languages:</b>	Python, SQL, R
<b>Packages:</b>	NumPy, Pandas, Matplotlib, TensorFlow
<b>Database Management:</b>	MySQL, PostgreSQL, MongoDB, Oracle
<b>Cloud Technologies:</b>	Microsoft Azure, Amazon Web Services (AWS)
<b>Big Data Technologies:</b>	Hadoop, MapReduce, HDFS, Sqoop, Hive, NIFI, Kafka, Apache Spark
<b>IDEs:</b>	Visual Studio Code, PyCharm, Jupyter Notebook
<b>Visualization Tools:</b>	Tableau, Power BI
<b>Other Technical Skills:</b>	Machine Learning, Data Management, Marketing Analytics, Information Technology Strategy, Selenium, Jira, Digital Innovation, ETL/ELT Process Innovation & Management, Big Data Technology, Microsoft SQL Server, SSIS, SSRS, SSAS, Kubernetes, Snowflake, Informatica, Data Warehouse, Data Architecture Design, Data Security, Data Management, Data Modeling, Data Integration
<b>Version Control Tool:</b>	Git, GitHub, SVN, Bitbucket

### EXPERIENCE

<b>Capital One, TX</b>	<b>  Data Engineer</b>	<b>Aug 2022 – Present</b>
<ul style="list-style-type: none"><li>• Led a data processing optimization project at Capital One, achieving a 30% reduction in processing times using Apache Spark and Hadoop.</li><li>• Developed Python scripts for seamless integration with AWS S3, enhancing cloud-based storage solutions and reducing data retrieval times by 25%.</li><li>• Automated comprehensive data quality checks within the ETL pipeline, leading to an impressive 40% reduction in financial data errors.</li><li>• Created Power BI dashboards to visually represent data quality metrics, allowing stakeholders to track and address issues identified through automated data quality checks.</li><li>• Leveraged SQL queries to facilitate real-time communication via WebSocket technology, enabling instant updates on market changes and trade executions.</li></ul>		

- Leveraged Apache Spark for distributed data processing, achieving a 30% reduction in overall processing times through parallelized computation and utilized Hadoop for scalable storage solutions, allowing the project to handle large volumes of financial data efficiently.
- Applied advanced Excel functionalities for demand forecasting, using statistical functions and regression analysis to predict future financial data trends.
- Implemented robust data security measures and access controls within the Data Warehouse, adhering to data governance standards and protecting sensitive information.
- Utilized Pandas' time series capabilities for handling temporal data, essential for analyzing historical consumption patterns and making informed decisions.
- Utilized Seaborn pair plots for multivariate analysis, exploring relationships between multiple variables and identifying potential patterns or outliers.

## **Zensar Technology, India | Data Engineer**

**May 2018 – Dec 2020**

- Integrated diverse healthcare data sources, including Electronic Health Records (EHR), medical imaging systems, billing systems, and administrative databases.
- Provided Tableau dashboards and data sources to healthcare and hospital corporations to understand demand, pricing, geospatial claim concentrations, deidentified and reidentified customer claims across multiple claims networks, consultation on hospital expansion and location, etc. as requested.
- Worked in designing tables in Hive, MYSQL using SQOOP and processing healthcare data like importing and exporting of databases to the HDFS, involved in processing large datasets of different forms including structured, semi-structured and unstructured data.
- Standardized and transformed data into a unified format, adhering to healthcare data standards such as HL7 and DICOM, ensuring consistency and compatibility.
- Implemented robust security measures and ensure compliance with healthcare data privacy regulations such as HIPAA, including encryption and access controls.
- Utilized Azure Stream Analytics for real-time data streaming, enabling the ingestion and processing of continuous streams of data from medical devices and IoT devices.
- Assisted in machine learning models for telehealth triage, assisting in prioritizing and routing patient inquiries based on severity and urgency.
- Designed the data warehouse to be scalable, allowing it to handle increasing volumes of healthcare data, and implemented performance tuning measures to optimize query execution times.
- Developed pie charts or bar charts in Matplotlib to represent the distribution of patient demographics, aiding in demographic-based analyses and targeted healthcare interventions.
- Used pivot tables to compare performance metrics across different healthcare facilities, including patient satisfaction scores, treatment success rates, and resource utilization.

## **EDUCATION**

**Master of Science in Computer Science** - Southern Arkansas University

**Bachelor of Technology in Electronics and Communication Engineering**- Sreenidhi Institute of Science & Technology, India