Prem Sita Ram Karri Data Engineer

Profile

Experienced Data Engineer with around 4 years of experience in designing and building scalable data pipelines using technologies such as Hadoop, Spark, and SQL. Proficient in ETL processes, data modeling, database management systems (DBMS), and data warehousing solutions. Skilled in extracting insights from large datasets using advanced analytical tools and techniques.

Skills

Programming Languages: Python, R, Java, Scala, SQL, Unix/Shell Scripting

Big Data Tools: Hadoop, HDFS, MapReduce, Hive, Sqoop, Oozie, EMR, Spark, Pig, lambda functions, Zookeeper

Frameworks & Tools: NumPy, Scikit-learn, Pandas, Seaborn, PySpark, Power BI, Tableau, Git, GitHub, MS Excel, MS Access, Airflow, ETL, Jira, Agile/Scrum, Jenkins, Docker, Confluence

Datastores and Cloud: Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP), MySQL, Oracle, MongoDB, Teradata, PostgreSQL, Netezza, Cassandra, Apache Kafka, Snowflake, Databricks, Azure Data Factory, Azure Synapse, Azure Data Lake

Professional Experience

Data Engineer, IQVIA

Oct 2022 – present | Remote, USA

- Architected and implemented a scalable data integration platform for a healthcare provider, leveraging Python and SQL for ETL processes to ensure accurate and timely extraction, transformation, and loading of patient data.
- Designed and orchestrated real-time data streaming using Apache Kafka, enabling immediate insights into patient health metrics and clinical outcomes.
- Spearheaded the migration of on-premises data infrastructure to AWS cloud services (S3, EMR, Redshift), optimizing performance, scalability, and cost efficiency.
- Engineered automated data pipelines utilizing Apache Airflow, facilitating seamless data flow and orchestration across various healthcare data sources, including EHR systems and IoT devices.
- Developed interactive dashboards and reports using Power BI, enabling stakeholders to visualize and analyze healthcare data trends and performance metrics in real-time.
- Implemented robust data security measures and compliance standards (e.g., HIPAA) to ensure the confidentiality, integrity, and availability of sensitive patient information.

Data Engineer, Southwest Airlines

Apr 2022 - Sep 2022 | Frisco, USA

- Designed and implemented robust data integration pipelines utilizing ETL processes, enabling seamless collection and transformation of aviation data from diverse sources.
- Employed advanced Python (Numpy, Pandas) and SQL techniques for meticulous data cleaning and validation, ensuring the accuracy and reliability of the aviation dataset.
- Deployed scalable, secure cloud-based storage solutions on AWS S3, accommodating structured and unstructured aviation data with a focus on performance and data integrity.
- Conducted large-scale data processing using Apache Spark, Hadoop, and Python, and created visually intuitive dashboards using Tableau, Power BI, and Excel for real-time insights and strategic decision-making.

Data Analyst, L-Com Inc.

Sep 2019 – Jul 2021 | Bangalore, India

- Developed a Python-centric project aimed at augmenting risk assessment precision, employing meticulous data preprocessing, feature engineering, and model development strategies to deliver 30% increase in accuracy.
- Orchestrated the integration of cutting-edge Python libraries such as NumPy and Pandas, elevating data preprocessing and manipulation capabilities to optimize project workflows and bolster overall efficiency.
- Spearheaded the automation of data extraction and transformation procedures using Python scripting, revolutionizing analytics workflows and yielding substantial reductions in manual labor.
- Elevated risk assessment accuracy by 10% through the strategic implementation of random forest ensemble learning techniques, effectively capturing intricate data relationships, and furthered accuracy by 15% via the deployment of neural network models, underscoring the efficacy of deep learning methodologies in data analysis.

Education

Masters of Science, Western Illinois University Computer and Information Science

Aug 2021 – Dec 2022 | Macomb, USA

Bachelors of Technology, C.M.R Institute of Technology **Computer Science Engineering**