Wesley Lau

Data Analyst

PROFESSIONAL EXPERIENCE

National Cancer Institute   12/2022 – 1/2024

Data Engineer   Bethesda, MD

- Refined the Neo4j data model to better accommodate incoming data types; the improved design framework facilitated integration of diverse data sources.

- Mapped and incorporated a new data source into the centralized database, converting 500 structural data points to NoSQL.

- Optimized the Python data loader system by implementing multithreading and data caching techniques, increasing data loading speed and efficiency.

- Created a Tableau visualization dashboard that aggregated data from the Neo4j database, enabling researchers to gain insights into trends and patterns.

DHS HQ   05/2021 – 6/2022

Data Analyst   Arlington, VA

- Designed and executed a thorough data analysis protocol for database integration, which reduced data discrepancies by 60%, fostering trust in analytics and promoting data-driven culture within the organization.

- Built custom, enterprise level data visualization dashboard to enable data exploration by data architect for designing centralize data repository.

- Architected and executed a complex SQL query to aggregate data from multiple sources, reducing report generation time from 20 minutes to under 5 minutes.

- Introduced JSON schema for managing NoSQL data repository, which enhanced data integrity and allowing for improved analytics and reporting capabilities.

DHS FEMA   08/2018 – 05/2021

Data Analyst   Washington D.C.

- Developed and implemented a complex AWS Athena query system to retrieve and process data from AWS data storage system, enabling faster insights for the data science team.

- Crafted detailed data flow diagrams illustrating existing system interactions, laying groundwork for centralized data model creation.

- Generated an interactive data visualization dashboard for business analysts, facilitating better understanding of complex data sets.

- Revamped data loading process by reconstructing an existing Python data loader with AWS Glue and data catalog; optimized data processing efficiency and reduced data loading time by 50%.

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SKILLS

Technical Skill:
- Data Analysis
- Data Cleansing
- Data Warehousing
- Data Mapping
- Database management
- Systems Integration
- Workflow Development
- Database Development
- Extract, Transform, Load
- Data Visualization
- Data Modeling

Tools and Software:
- AWS
- Docker
- Python (Pandas, PySpark)
- Node.js
- Git (GitHub, GitLab)
- RDBMS (Oracle, Postgres, MySQL, SQL Server)
- MongoDB
- Neo4j
- Qlik Sense
- Tableau
- Talend

Certification
- Google Advanced Data Analytics Specialization. (Mar 2024)
- Google Data Analytics Professional Certificate. (Feb 2024)
- Qlik Sense Data Architect - v3. (Aug 2016)
- AWS Certified Data Engineer – Associate (Expected Nov 2024)

EDUCATION

Olivet Nazarene University, Bourbonnais, IL

Bachelor of Science in Engineering, Electrical Engineering

Flagstar Bank   10/2017 – 03/2018
Data Analyst   Detroit, MI

- Designed data pipeline that imports data from different data base including Oracle, MongoDB and S3 files into Qlik sense.

- Deployed a customized ETL solution ETL job to parse and load XML and JSON data into MongoDB.

- Created interactive data visualizations for 230 non-technical employees, simplifying complex data sets and facilitating better decision-making; increased data comprehension and actionable insights across the organization.

First Guarantee Mortgage Company   09/2016 – 09/2017
Data Analyst   McLean, VA

- Leveraged SQL, Python, and Qlik Sense to analyze 20TB of data and improved business decisions making.

- Created a comprehensive data visualization dashboard leveraging Qlik Sense to convey complicated data sets to the business Analysts for improving customer's experience.

- Constructed custom Talend job to extract data from centralize Oracle database to transactional MongoDB.

- Established BI connector between MongoDB and Qlik Sense within Linux environment.