|  |  |
| --- | --- |
| **Wesley Lau**  Database Developer  **PROFESSIONAL EXPERIENCE**  **National Cancer Institute** 12/2022 – 1/2024  Data EngineerBethesda, MD   * Expanded the Neo4j data model to integrate data from MongoDB and Postgres, enriching the dataset with over 50,000 records. * 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. * Formulated and implemented a customized Cypher query to extract data from Neo4j Nodes, improving data accessibility and enabling swift data extraction within a complex database structure.   **DHS HQ** 05/2021 – 6/2022  Data AnalystArlington, VA   * Built a data hub that facilitated the integration of 5 databases, including SQL Server and Oracle; the solution is currently utilized by the data management team. * Developed a streamlined ETL system that extracted and loaded over 200,000 records monthly from multiple agencies into the centralized database, ensuring data integrity and supporting complex queries for enhanced operational efficiency. * Architected and executed a complex SQL query to aggregate data from multiple sources, reducing report generation time from 20 minutes to under 5 minutes.   **DHS FEMA** 08/2018 – 05/2021  Data AnalystWashington 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. * Orchestrated a successful migration of data analysis systems to the cloud, leading to an improvement in system scalability and a 55% increase in data processing speed. * 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%. * Introduced JSON schema for managing NoSQL data structures; achieved an improvement in data retrieval efficiency, enabling faster processing and analysis of critical business information. | (571) 354-9369  [wesleylau.wcl@gmail.com](mailto:wesleylau.wcl@gmail.com)  [LinkedIn Profile](https://www.linkedin.com/in/wesley-lau-34a8b374/)  **SKILLS**  • Data Analysis  • Data Cleansing  • Data Warehousing  • Data Mapping  • Database management  • Systems Integration  • Database Development  • Extract, Transform, Load  • Data Visualization  • Data Modeling  **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)  **Tools**  • AWS  • Docker  • Python (Pandas, PySpark)  • JIRA  • Git (GitHub, GitLab)  • RDBMS (Oracle, Postgres,   MySQL, SQL Server)  • MongoDB  • Neo4j  • Qlik Sense  • Tableau  • Talend  **EDUCATION**  Olivet Nazarene University, Bourbonnais, IL  **Bachelor** of Science in **Engineering,**  **Electrical Engineering**  (2012 - 2016) |
| **Flagstar Bank** 10/2017 – 03/2018  Data AnalystDetroit, 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 AnalystMcLean, VA   * Leveraged SQL, Python, and Qlik Sense to analyze 20TB of data and improved business decisions making. * Designed 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 Generate reports. | **Language**  • English  • Chinese |