**wesley Lau**

(571) 354-9369 • [wesleylau.wcl@gmail.com](mailto:wesleylau.wcl@gmail.com) • [LinkedIn](https://www.linkedin.com/in/wesley-lau-34a8b374/)

**Professional Experience**

**Data Engineer** | National Cancer Institute | Contract2022 – 2025

* Expanded existing Neo4j data model, integrating over 50 incoming structural and non-structural data points from diverse systems.
* Revamped the ETL workflow to seamlessly integrate new data entities, attributes, and relationships from an updated data model.
* Implemented event-driven ETL automation with AWS Lambda that triggered the ETL process based on S3 uploads.
* Created data visualization with data from the Neo4j database to streamline data analysis processes in Jupyter notebook.
* Engineered a Node.js API that streamlined connections between the front-end application and MongoDB.

**Data Engineer** | United States Department of Homeland Security | Contract2021 – 2022

* Coordinated efforts with SME and key stakeholders to define data policy; established an effective governance framework.
* Collaborated in designing an Enterprise Data Warehouse that centralized housing data from 8 agencies.
* Devised a migration plan for integrating 30+ datasets from multiple systems to the data warehouse.
* Built interactive dashboards in Tableau leveraging the data repository, leading to more informed decision-making processes help start 2 initiatives.
* Wrote and maintained a SQL query to decrease the processing burden on Tableau Server, reducing report generation time by 60%.

**Data Analyst** | FEMA | Contract2018 – 2021

* Constructed data pipelines with AWS Glue to seamlessly ingest and transform legacy datasets from Oracle and Postgres, achieving streamlined loading into the AWS S3 data lake for enhanced accessibility.
* Designed and implemented a complex AWS Athena query system to retrieve and process data from AWS S3 data lake, enabling faster insights for the data science team.
* Collaborated with stakeholders to create standardized data models and enforce consistency across relational databases (AWS Aurora, Oracle) and non-structural repository (AWS S3, DynamoDB).
* Constructed a layered data architecture with a normalized central Layer and a staging Area; tailored data marts to meet the unique analytical needs for different reports.

**Data Analyst** | Flagstar Bank| Contract2017-2018

* Developed and deployed an efficient custom ETL framework that parsed complex XML structures along with JSON datasets into MongoDB; streamlined data processing workflows, saving approximately 30 hours per month.

**Data Analyst** | First Guarantee Mortgage Company | Contract2016 - 2018

* Designed a comprehensive data visualization dashboard leveraging Qlik Sense to convey complicated data sets to the business Analysts for improving customer’s experience.
* Engineered a robust Talend ETL pipeline to seamlessly transfer large datasets from an Oracle database into MongoDB; increased data accessibility for business analysts by ensuring integration was completed within two hours daily.

**Education**

**Olivet Nazarene University** Bourbonnais, IL

Bachelor of Engineering, Major in Electrical Engineering2012 – 2016

**Other**

**Technical Skills**: Data Warehouse, ETL/ ELT, Change Management, Data Governance

**Tools and software**: Python (PySpark, dbt, Pandas, PySpark), RDBMS (SQL Server, Postgres, Oracle, MySQL), Non-structural data store (MongoDB, Neo4j, XML, Json), Node JS, Tableau, Power BI, Excel, AWS, Git, Docker, Jira

**Certification**: Meta Database engineer (Jan 2025), Google Advanced Data Analytics Specialization (Mar 2024)