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| Data Analyst/ Data Engineer  Wesley Lau | (571) 354-9369 | [wesleylau.wcl@gmail.com](mailto:wesleylau.wcl@gmail.com)  [LinkedIn Profile](https://www.linkedin.com/in/wesley-lau-34a8b374/)  Fairfax, VA |

# Education

Bachelor of Science in ENGINEERING – Drexel University – Bourbonnais, IL Jun 2016

Majors: Electrical Engineering

# Certification

Qlik Sense Data Architect-v3 Sept 2017

Credential ID: QSDA0368v3

Google Advanced Data Analytics Specialization Mar 2024

Credential ID: 2FA6R2B257GJ

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| **Python**  pandas, matplotlib, PySpark | **Database Management**  Oracle, Postgres, SQL Server, MySQL, ETL Processes | **Data Visualization**  Power BI, Tableau |
| **AWS**  S3, Athena, Glue, DynamoDB | **Data Modeling**  Erwin Data Modeler, Oracle SQL Developer Data Modeler | **NoSQL**  MongoDB, Neo4j, JSON, XML |

# Technical Skills

# Work Experience

Data Engineer **–** National Cancer Institute **–** Bethesda, MDDec 2022 - Jan 2024

* Led the integration of MongoDB and PostgreSQL datasets into Neo4j, transforming relational and document-based data into graph structures to enable advanced network analysis and visualization.
* Expanded the existing Nro4j data repository by integrating additional 2 data sources.
* Optimized the Python data loader system by implementing multithreading and data caching techniques, increasing data loading speed and efficiency.

Data Analyst – DHS HQ – Arlington, VA May 2021 - May 2022

* Designed and implemented a centralized data repository using Oracle SQL Developer Data Modeler to integrate data from multiple sources, improving data accessibility and consistency across departments.
* Diagnosed and resolved database performance bottlenecks using SQL Tuning Advisor, reducing system downtime and increasing overall efficiency by 35%.
* Architected and executed a complex SQL query to aggregate data from centralize data repository, reducing report generation time by 60%.

Data Analyst – DHS FEMA – Washington D.C. Aug 2018 – May 2021

* Modeled the database schema to support unified data standards and easy access for cross-departmental reporting.
* 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.
* Developed and managed ETL processes using AWS Glue, automating data extraction, transformation, and loading for analytics and reporting.
* Refined and optimized existing DynamoDB schemas to support new data entities and streamline integration, improving data retrieval times by 20%.

Data Analyst – Flagstar Bank – Detroit, MI Oct 2017 – Mar 2018

* Deployed a customized ETL solution to parse and load XML and JSON data into MongoDB.
* Created comprehensive ER diagrams to support business requirements and improve communication between stakeholders and the technical team.
* 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.

DATA Analyst – First Guarantee Mortgage Company – McLean, VA Sept 2016 – Sept 2017

* 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.