**Louis Agyekum** [agyekumlouis9@gmail.com](mailto:agyekumlouis9@gmail.com)



Data Scientist (705) 808-5562

Toronto, Canada

# EDUCATION

**Sustainability Studies - Master’s Degree** Trent University, Peterborough-Canada

**Statistics - Bachelor’s Degree**

University of Ghana, Legon

# WORK EXPERIENCE

## Trent University – Data Scientist

09/2021 – 03/2023

* Established efficient and scalable data pipelines and worked on a diverse range of data, such as transactional, student behavior, and campus activities.

# CERTIFICATES

#### AWS Cloud Practitioner :(11/2022)

*Cloud Practitioner certification is to prove knowledge of cloud concepts, core AWS services, AWS pricing, SLA, and lifecycle, and the fundamentals of cloud security, privacy, compliance, and trust.*

#### Machine Learning Lab (WorldQuant): (10/2022)

*“This certification provided me with hands-on experience in applying machine learning algorithms and techniques to real-world data science problems. It has given me the proficiency in working with popular machine learning libraries”*

#### The Complete SQL Bootcamp: (07/2018)

*This certification taught me the fundamental concepts and techniques of SQL, including data querying, manipulation, and management. It has equipped me with proficiency in working with popular database management systems, such as MySQL, and PostgreSQL, enabling me to manage large volumes of data.*

# PROJECTS

#### Portfolio Website: https://louis-agyekum.github.io

#### Grocery Delivery Optimization

*“Created and applied a Genetic Algorithm in Python to search out a near-optimal route across 10 addresses. This led to estimated savings of up to 50% in both delivery time and fuel consumption over a route based upon transaction order alone.”*

#### “You Are What You Eat” Customer Segmentation

*Used k-means clustering on grocery transaction data to split out customers into distinct “shopper types” that could be used to better understand customers over time, and to more accurately target customers with relevant content and promotions.*

# SKILLS

Programming: *Python, R, MySQL, MATLAB, SPSS, STATA, MongoDB, Excel, Google Sheets.*

### Data Visualization: Power BI, Tableau.

Software: *Metasploit, Splunk, Wireshark, Kali Linux, Metasploit Eclipse, CodeBlocks, Forensic Toolkit.*

Libraries: *NumPy, pandas, Tensorflow, Keras, Pytorch, matplotlib. Soc, ISO, NIST, Scripting,*

* Developed machine learning models, including conversion rate prediction and student performance attrition, to inform decision-making within the Chancellor’s department and increase the university’s IQ.
* Instilled valuable technical skills and knowledge within students by delivering curriculum for undergraduate and graduate-level courses in Python programming and introductory probability.
* Led various initiatives to promote a data-driven culture, including training sessions, workshops, insights meetings, and presentations to senior leadership.

**MTN Group – Credit, Fraud, and Risk Analyst**

08/2018 – 08/2021

* Recognized $3M in annual fraud and communicated findings to stakeholders through the creation of tableau dashboards and execution of detailed exploratory analysis.
* Delivered multiple ad-hoc projects using data analysis tools, including Oracle SQL and Microsoft SQL servers.
* Analyzed outlier data using advanced Microsoft Excel skills, including Pivot Tables and V- Lookups, to drive business insights.
* Enhanced business operations through comprehensive data analysis and research as part of project deliverables.

## Data Analyst Intern

### Ministry of Finance - Ghana

06/2017-09/2017

* Conducted comprehensive data analysis using Excel and SQL to inform the development of a national financial management information system.
* Presented data-driven insights and recommendations to senior leadership to improve decision-making and increase efficiency within the Ministry.
* Contributed to the development of data visualization dashboards using Power BI to track key performance indicators and monitor progress toward strategic goals.
* Developed and implemented a data quality assurance plan that reduced errors by 50%, improving the accuracy and reliability of critical data used for program evaluation and decision-making.