

## ZAK MUMUNI

### Senior Data Analyst

Portfolio (<https://zak-mumuni-portfolio.netlify.app/>)

R | Python | SQL | BigQuery | Tableau | Dashboard | AWS | Airflow

## SUMMARY

Seasoned Data Scientist and Senior Data Analyst with over 8 years of experience transforming complex datasets into actionable insights. Skilled in developing forecasting models, building data pipelines, and designing intuitive dashboards. Known for strong analytical abilities, meticulous attention to detail, and a collaborative mindset. Proficient in R, Python, SQL, Tableau, BigQuery, and React.js, with a proven history of delivering cloud-based solutions that accelerate and enhance data-driven decision-making.

## TECHNICAL SKILLS

- **Languages:** R, Python, JavaScript
- **Tools:** BigQuery, Databricks, Tableau, Power BI, MySQL, SQLite
- **Visualization:** Tableau, ggplot2, Plotly, Dash
- **Cloud:** AWS, Azure, GCP
- **Other:** VS Code, Git, Jupyter, React.js

## PROFESSIONAL EXPERIENCE

### Senior Data Analyst | OMPO — 03/2020 – 12/2024

- Built data pipelines using Python, DBT, and Airflow for real-time traffic analysis
  - [https://github.com/zmtcampo/traffic\\_pipeline\\_dbt\\_airflow](https://github.com/zmtcampo/traffic_pipeline_dbt_airflow)
- Built a custom analytics dashboard using Python and React.js to monitor KPIs, adopted company-wide by 5 teams for data-driven decision
  - <https://github.com/zmtcampo/Traffic-Analysis-Project>
  - [https://github.com/zmtcampo/react\\_dashboard](https://github.com/zmtcampo/react_dashboard)
- Applied K-MEANS clustering to identify and analyze concentrations of socio-economically-disadvantaged populations in the Honolulu, Hawaii metropolitan area.
- Applied PCA in Python to merge transportation disadvantage indicators into a single factor explaining most variance in Honolulu, Hawaii metro data.
- Developed interactive Tableau dashboards leveraging BigQuery, reducing report generation time.
- Led the transition from legacy SQL servers to Google BigQuery, improving query speed.
- Redesigned BigQuery data models for efficiency, cutting query costs while enhancing scalability.

**Data Analyst | EWG CoG — 03/2017 – 02/2020**

- Developed LSTM and SARIMA models to predict future traffic congestion in the St. Louis, MI metropolitan area
  - [https://github.com/zmtcampo/time-series-forecasting/blob/main/DS\\_forecasting.ipynb](https://github.com/zmtcampo/time-series-forecasting/blob/main/DS_forecasting.ipynb)
- Implemented binary logistic regression, KNN, SVM, and Decision Trees in Python to predict roadway congestion in the St. Louis, Missouri metropolitan area
  - [https://github.com/zmtcampo/cluster\\_analysis/blob/main/DS\\_clustering\\_Analysis.ipynb](https://github.com/zmtcampo/cluster_analysis/blob/main/DS_clustering_Analysis.ipynb)
- Reduced ad-hoc data requests by building self-service analytics apps with Shiny
  - <https://github.com/zmtcampo/fc-data-project>
- Created data-driven models to analyze traffic congestion and embedded them in self-service Shiny apps.
- Designed real-time Tableau dashboards adopted by business users for data-driven decisions.

**Data Analyst | ESDO Consult — 06/2011 – 08/2013**

- Developed SQL-based predictive models for traffic congestion, improving targeting accuracy.
- Designed executive Tableau dashboards adopted for quarterly business reviews and leadership reporting.
- Automated R Markdown reporting, creating standardized templates that reduced team analysis time.
- Managed a customer analytics SQL data warehouse, ensuring reliable data pipelines for business insights.
- Automated performance analysis, eliminating manual reporting bottlenecks.

**Data Analyst | KTA Consulting — 09/2000 – 09/2009**

- Developed custom SQL queries and Python scripts to automate processing and analysis of client survey data, uncovering actionable insights through trend identification.
- Designed and implemented data visualizations using ggplot2 and Tableau to communicate key insights.
- Performed comprehensive data cleaning and transformation using Python and SQL to ensure data integrity.

**EDUCATION**

- M.A. (Urban Studies) – Portland State University
- M.A. (Urban Planning) – Minnesota State University (Mankato)
- M.A. (Development Evaluation) – University of Antwerp (Belgium)
- B.Sc. (Planning) – KNUST (Kumasi – Ghana)

## **CERTIFICATION & COURSES**

- Azure Data Scientist Associate Certificate
- IBM Data Scientist Professional Certificate
- Deep Neural Networks with Pytorch
- Sequences, Time Series and Prediction