# ADRIAN JULIUS ALUOCH

#### **Skills**

- SQL (PostgreSQL, MySQL, Microsoft SQL Server, MariaDB)
- Python (Pandas, NumPy, Matplotlib, Seaborn, Altair, Plotly, SciPy, Statsmodels)
- R (tidyverse, dplyr, janitor, ggplot, ggpubr, shiny)
- Microsoft Excel (VBA, XLOOKUP, Conditional Formatting, Power Query, Pivot Tables, Power Pivot)
- Google Sheets (Data Validation, Query Function, Conditional Formatting, Pivot Tables)
- Microsoft Power Bi (Power Query, Data Modelling, DAX)
- Tableau (Tableau Prep, Calculated Fields)
- Google BigQuery (Data Ingestion, Data Modelling, SQL Queries, Data Warehouse)

# **Projects**

#### ROAD ACCIDENTS IN KENYA – Personal Project – Kisumu, Kenya, KE

October 2024

- Analyzed road accidents data in Kenya to uncover patterns and risk areas using Python and crowdsourced data from Ma3Route.
- Utilized geopy to process geolocation data and folium to create interactive maps highlighting accident hotspots and trends.
- Compiled findings into a report with ggplot and Quarto, revealing a 60.06% reduction in accidents (2018–2023).

### REAL ESTATE PROPERTY LISTINGS ANALYSIS - Personal Project - Eldoret, Kenya, KE

November 2024

- Analyzed 100,000+ property listings in Nairobi, revealing apartments dominate the market at 34.3% of listings, followed closely by houses at 33.9%.
- Identified **Ongata Rongai** as offering the best value at **Ksh 44,270/m²**, while **Kileleshwa** and **Karen** showed the highest average property prices (**Ksh 93M** and **Ksh 82.5M** respectively).

#### IMPACT OF AIRBNB ON NEIGHBOURHOODS - Personal Project - Kisumu, Kenya, KE

August 2024

- Analyzed Airbnb data to uncover trends, revealing 81.8% of listings are Entire Homes, indicating a shift towards profit-driven short-term rentals.
- Identified **income disparities** between resident and non-resident hosts, with residents earning slightly more, though not significantly altering local wealth dynamics.
- Highlighted the platform's role in **reducing long-term housing availability**, driven by hosts with **multiple listings**, like Propr (331 units).

#### EPRA FUEL PRESS RELEASE ANALYSIS - Personal Project - Eldoret, Kenya, KE

September 2024

- Analyzed regional fuel price disparities using EPRA data, highlighting logistical factors like transportation costs and infrastructure challenges in remote towns (e.g., Mandera at Ksh 194.66).
- Identified a 2024 nationwide decline in fuel prices, driven by global market shifts, government subsidies, and tax adjustments.

## **Work Experience**

# DATA ANALYST ATTACHEE – KEMRI-CGHR – Kisumu, Kenya, KE

May 2024 - August 2024

- Managed and maintained data using Microsoft SQL Server, ensuring data integrity and efficiency.
- Conducted statistical analysis utilizing Python, R and Stata, deriving insights to support research and operational decisions.
- Developed comprehensive data reports and visualizations using Quarto, effectively communicating key findings to stakeholders.
- Collaborated with a cross-functional team to streamline data workflows, improving organization's reporting processes.

#### **Education**

BACHELOR OF SCIENCE IN COMPUTER SCIENCE - Moi University - Eldoret, Kenya, KE

August 2025

Major: Data Analytics