

LINDA KARANI

Data Scientist

I am a seasoned data scientist with over 4 years of experience specializing in the development of data-intensive tools, comprehensive data processing, intricate data analysis and visualization, predictive modeling, and the transformation of raw data into actionable insights via interactive and analytical dashboards. My proficiency extends to both supervised and unsupervised machine learning, advanced statistical analysis, as well as satellite imagery and geospatial data analysis. I am adept in scripting languages such as R and Python.

My strength lies not only in technical skills but also in creating tangible value for stakeholders. I excel at leveraging data science and analytics to convey information in a clear and impactful manner, ensuring it is beneficial for end users. My passion lies in using data to uncover valuable insights, contribute to societal good, and drive informed decision-making. I thrive on learning and actively seek out new challenges to further enhance my expertise.



EDUCATION

2021
|
2024

Strathmore University

Masters of Science in Data Science and Analytics 📍 Nairobi, Kenya

Relevant units: Advanced machine learning concepts, Advanced statistical analysis, Data visualization and communication

2022

ETH Zurich

Dissertation: Importance of reproducibility in advancing Sustainable Development Goal(SDG) 6 in R : A comparison of statistical models
📍 Zurich, Switzerland

2014
|
2018

Strathmore University

Bachelor of Business Science in Financial Economics
📍 Nairobi, Kenya

CONTACT INFO

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🐙 github.com/KaraniLinda

in [Linkedin](#)

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SKILLS SUMMARY

Database/Server : MySQL, PostgreSQL

Programming languages : Python, R programming

Frameworks/libraries : NumPy, Pandas, matplotlib, Scikit-learn, ggplot, tidyverse, dplyr, leaflet, caret

Data visualization/Reporting : R Markdown, Quarto, Power BI, Tableau , Google Data Studio, Excel

Geospatial packages: Uber-H3(Hexagon), ARCGIS, R(raster,tmap), Python (geopandas, rasterio, xarray)

Cloud computing : Google cloud platform

Git and Version Control

LANGUAGES

English : Native

French : Intermediate



PROFESSIONAL EXPERIENCE

November,
2022
|
April,
2024

Data scientist

World data lab

📍 Nairobi, Kenya

- Led the comprehensive collection, analysis, and forecasting of youth labor force survey data in collaboration with the Mastercard Foundation. Executed the project for Kenya, Rwanda, and Ghana, contributing to the establishment of a youth unemployment clock.
- Utilized satellite data such as night lights and land cover data to map aggregate spending for Spain at the grid (100m*100m) and hexagon level (Uber H3 - Res 9), demonstrating proficiency in geospatial analysis
- Applied advanced machine learning algorithms such as Random Forest and linear regression models at the lowest census unit for European countries, leveraging geospatial covariates to effectively disaggregate spending at the grid level.
- Designed and led hackathons to impart knowledge to students in collaboration with top universities in Kenya
- Conducting rigorous data quality assurance checks, ensuring the continuous enhancement of models with the latest and highest-quality data.
- Demonstrated expertise in the in-depth analysis of household and census survey data.
- Produced data-driven, high-quality insights for clients, emphasizing a commitment to delivering impactful and actionable information.

2021
|
November,
2022

Senior associate- Data analysis and business modelling

Sanergy

📍 Nairobi, Kenya

- Was part of a team that led data management and analysis for a multinational corporation to identify areas in the city with the greatest potential for introduction of non-sewered sanitation products to allow for future upscale
- Developed several robust quantitative and qualitative data collection tools for citywide inclusive sanitation planning to determine market share and predict an appropriate mix of sanitation products based on key indicators and metrics.
- Analyzed data collected by the Cost and Climate in Urban Sanitation (CACTUS) project led by the University of Leeds and supported by the Bill and Melinda Gates Foundation and used the findings to create a set of improved data collection tools and manuals to facilitate widespread contribution to a database of benchmark cost estimates to inform sanitation investment decisions.
- Effectively communicating analysis and project results to senior leadership and external stakeholders
- Completion of diverse advisory projects with a high standard of quality and production of comprehensive analytical reports
- Conducted data analysis for a UNICEF implemented project to inform progress towards safely managed sanitation
- Proactive stakeholder management and advisory services

2019
|
2021

● Finance/Data analyst

Sanergy.

📍 Nairobi, Kenya

- Identified key organizational metrics, cleaned and analyzed data from all departments and presented results on Tableau improving accuracy of results by 35%.
- Aggregated data across all departments that was previously in multiple different sources to create an interactive organization wide dashboard based on key KPIs that led to increased efficiency in operations and improved decision making and that resulted in a 30% reduction in redundancy.
- Using data analytics to identify business needs and requirements and deliver data-driven recommendations and reports to executives and stakeholders.
- Supported teams to understand, monitor and control key business metrics to achieve success and base decisions on data.
- Prepared financial statements and other financial reports and reported performance to senior management and the finance board



REFERENCES

References available upon request