

# Joshua Oluoch, Senior Data Analyst

141-40110, Nairobi, Kenya, +254728346597, oluoch.joshua@gmail.com

Date of birth	23rd February 1988	Nationality	Kenyan
Place of birth	Kenya		

LINKS [Github](#), [Linkedin](#)

## PROFILE

Experienced Data Analyst and Python Developer with 11 years of expertise in data science, data analytics, and Python development, combined with 3 years of managerial experience.

Proven track record of delivering impactful data-driven solutions to complex business challenges. Strong technical skills in data analysis, statistical modeling, machine learning, and data visualization.

Proficient in Python, R, SQL, and other data manipulation tools. Excellent communication and leadership skills, with a demonstrated ability to lead cross-functional teams and drive results.

## EMPLOYMENT HISTORY

Nov 2020 — Present **Research and Analyst Lead, Radio Africa Group** Nairobi, Kenya

As the Research and Analyst Lead at Radio Africa Limited, a leading media company in Kenya, I have been instrumental in transforming the analytical processes of the department, driving data-driven decision-making, and leveraging advanced analytics tools to enhance research and analysis capabilities. My key achievements in this role include:

### Transforming Analytical Processes:

- Introduced and implemented advanced analytics tools such as Python, R, Looker, Tableau, Python Dash, Power BI, and machine learning models to the department's analytics workflow, enabling more sophisticated data analysis and visualization, resulting in more accurate and actionable insights for business decision-making.
- Developed custom analytics solutions using Python and R to automate data processing, analysis, and visualization tasks, reducing manual effort by 40% and increasing efficiency in delivering insights and recommendations.

### Improving Research Processes:

- Led the transition from Computer-Assisted Personal Interviewing (CAPI) methodology to a mixture of Computer-Assisted Telephone Interviewing (CATI) and online research, resulting in improved data collection processes, increased data accuracy, and faster turnaround time in research projects.
- Implemented data quality checks and validation processes to ensure data integrity and consistency across research projects, resulting in improved data reliability and accuracy in research findings.

### Enhancing Predictive Modeling for Digital User Retention:

- Developed and implemented predictive models using machine learning techniques to analyze user behavior data and identify patterns and trends that contribute to digital user retention.
- Utilized predictive modeling to optimize retention strategies, resulting in increased user retention rates by 20% and improved customer engagement in digital platforms.

### Achievements:

- Received recognition for outstanding performance and contribution to the department's analytics capabilities, including the successful implementation of advanced analytics tools and techniques.
- Presented research findings and data-driven insights to senior management and key stakeholders, influencing strategic decision-making and driving business growth.

As the Research and Analyst Lead at Radio Africa Limited, I have successfully transformed the analytical processes of the department, introduced advanced analytics tools, improved research methodologies, and implemented predictive models to drive data-driven decision-making and achieve tangible business results. I am proud of my contributions in leveraging analytics to improve business performance and look forward to continuing to drive innovation and deliver value to the organization.

Oct 2015 — Sep 2020 **Senior Data Analyst, Radio Africa Group** Westlands, Nairobi

At Radio Africa Limited, a leading media company in Kenya, I played a pivotal role as a Senior Data Analyst in transforming the organization's data analytics capabilities and revolutionizing their data management processes. My achievements during my tenure include:

#### Transforming Visualization:

- Created dynamic and visually appealing dashboards and reports using advanced data visualization tools such as Tableau, providing key insights and actionable recommendations to senior management.
- Streamlined data visualization processes by introducing best practices and implementing automated reporting mechanisms, reducing time spent on manual report generation by 50%.

#### Building ETL Tools for Data Management:

- Developed and implemented ETL (Extract, Transform, Load) processes using Python, R, and SQL to extract data from multiple sources, cleanse and transform it, and load it into the data warehouse, resulting in more accurate and reliable data for analysis.
- Designed and implemented automated data validation and data quality checks to ensure data integrity, reducing data errors by 30% and improving overall data accuracy.

#### Transforming Department Analytics from Excel to Advanced Tools:

- Spearheaded the transition from Excel-based analytics to advanced analytics tools such as Python, R, Tableau, and SQL, enabling the team to conduct more sophisticated data analysis and generate actionable insights for various departments within the organization.
- Conducted comprehensive training programs for team members on using advanced analytics tools, resulting in increased data literacy and improved analytics capabilities among the team.

#### Achievements:

- Led a cross-functional team in implementing a data-driven decision-making culture within the organization, resulting in improved business performance and increased revenue by 15% over a two-year period.
- Received the "Data Analytics Excellence Award" for outstanding performance and contribution to the organization's data analytics capabilities.
- Successfully completed multiple complex data analytics projects, including market research, customer segmentation, and campaign optimization, resulting in improved marketing strategies and increased customer engagement.

Overall, my employment history at Radio Africa Limited demonstrates my expertise in transforming data analytics processes, building ETL tools for data management, and driving the adoption of advanced analytics tools. I am proud of my achievements in contributing to the organization's success and delivering tangible results through data-driven insights and recommendations.

Jul 2015 — Oct 2015

#### Data Analyst, Operations, Bridge International Academies

Nairobi

As a Data Analyst at Bridge International Academies, I was responsible for transforming and standardizing analytical processes through writing maintainable R and Python codes, as well as Excel templates. I also played a key role in building departmental Key Performance Indicator (KPI) dashboards for quick visualization of the company's position. In addition, I was actively involved in research when setting up new schools, providing valuable insights and data-driven recommendations.

#### Skills:

- Proficient in R and Python programming languages, with experience in writing maintainable and efficient code.
- Strong expertise in Excel, including advanced formulas, data manipulation, and template creation.
- Excellent data visualization skills, with the ability to build departmental KPI dashboards for quick and easy visualization of performance metrics.
- Demonstrated experience in transforming and standardizing analytical processes to improve efficiency and accuracy.
- Ability to conduct research, analyze data, and provide data-driven recommendations for decision-making.
- Strong attention to detail, with the ability to identify patterns and trends in data.
- Excellent communication skills, with the ability to effectively communicate complex data insights to stakeholders.

#### Responsibilities:

- Developed and maintained R and Python codes to streamline analytical processes, resulting in improved efficiency and accuracy in data analysis.
- Created Excel templates for data manipulation, analysis, and reporting, ensuring consistency and standardization across the organization.
- Built departmental KPI dashboards using data visualization tools, such as Tableau or Power BI, to provide quick and easy visualization of performance metrics for decision-making.
- Conducted research and analyzed data to support the setup of new schools, providing valuable insights and data-driven recommendations to inform decision-making.
- Collaborated with cross-functional teams, including Operations, Finance, and Education, to gather data and provide analytical support for various projects and initiatives.
- Monitored and analyzed data to identify patterns, trends, and opportunities for improvement, and presented findings to stakeholders in a clear and concise manner.

- Stayed up-to-date with industry trends and best practices in data analysis, and actively contributed to the continuous improvement of analytical processes and tools.

#### Achievements:

- Successfully transformed and standardized analytical processes through the implementation of maintainable R and Python codes and Excel templates, resulting in improved efficiency and accuracy in data analysis.
- Built departmental KPI dashboards that provided quick and easy visualization of performance metrics, enabling stakeholders to make informed decisions in a timely manner.
- Played a key role in the research and setup of new schools, providing valuable insights and data-driven recommendations that contributed to the successful launch of new initiatives.
- Received positive feedback from cross-functional teams for providing timely and accurate data analysis and insights that informed decision-making and supported various projects and initiatives.

Jul 2013 — Jul 2015

### Data Analyst/Python Developer , Actuarial Services (East Africa) Limited

Summary: As a Data Analyst/Python Developer at Actuarial Services (East Africa) Limited, a leading Actuarial services provider in Africa, I specialized in big data analytics, handling large datasets of 10 million rows and above using Python, R, and Hadoop. I also developed a reserving tool in R and Python that was widely used by insurance companies for accurate and efficient actuarial calculations. In addition, I built and maintained software primarily using Python, contributing to the company's technical capabilities and delivering high-quality solutions.

#### Skills:

- Strong proficiency in Python and R programming languages, with expertise in handling large datasets for big data analytics.
- Experience with Hadoop and other big data technologies for data processing and analysis.
- Solid understanding of actuarial concepts and techniques, including reserving and risk assessment.
- Ability to build and maintain software applications using Python, contributing to the development of technical capabilities within the organization.
- Strong analytical and problem-solving skills, with the ability to identify patterns and trends in complex data sets.
- Excellent communication and collaboration skills, with the ability to work effectively in cross-functional teams.
- Detail-oriented approach to data analysis and software development, ensuring accuracy and quality in deliverables.

#### Responsibilities:

- Conducted data analysis and performed complex calculations on large datasets of 10 million rows and above using Python, R, and Hadoop, to support actuarial assessments and risk evaluations.
- Developed and maintained a reserving tool in R and Python that was widely used by insurance companies for accurate and efficient actuarial calculations, contributing to improved decision-making and risk management.
- Built and maintained software applications primarily using Python, ensuring their functionality, reliability, and performance to meet business requirements.
- Collaborated with cross-functional teams, including actuaries, underwriters, and IT professionals, to gather data requirements, develop data models, and implement data-driven solutions.
- Conducted data validation and quality checks to ensure accuracy and integrity of data used in actuarial analyses and risk assessments.
- Developed and presented data-driven insights and recommendations to stakeholders, including senior management and clients, in a clear and concise manner.
- Stayed up-to-date with industry trends, best practices, and emerging technologies in big data analytics, actuarial sciences, and software development, and actively contributed to the continuous improvement of technical capabilities within the organization.

#### Achievements:

- Successfully handled and analyzed large datasets of 10 million rows and above using Python, R, and Hadoop, providing accurate and timely insights for actuarial assessments and risk evaluations.
- Developed a reserving tool in R and Python that was widely used by insurance companies, significantly improving the efficiency and accuracy of actuarial calculations.
- Built and maintained software applications primarily using Python, contributing to the technical capabilities of the organization and delivering high-quality solutions for internal and external clients.
- Received positive feedback from stakeholders for providing accurate and actionable data-driven insights and recommendations that informed decision-making and contributed to improved risk management strategies. Perform data analysis on the premium and claims data from the insurance companies using R, Excel, SPSS, and Python.
- Coordinate monitoring and evaluation on the company's pioneer projects including Financial Condition Reporting of the insurance companies, ERM (Enterprise risk Management) for financial organizations. Conduct research on the business opportunities and niche.

- Develop R packages for specific analysis type in the company Writing and maintaining documentation to data analysis development, logic, coding, testing, changes and corrections;
- In-house system development using PHP and Python to help in carrying out job specific actuarial analysis

---

## EDUCATION

Jan 2008 — Dec 2012	<b>Bachelor's Degree Bachelor of Science, Actuarial Science with Information Technology, Maseno University</b> Graduated with Second Class (Upper Division)	Kisumu
Feb 2003 — Nov 2006	<b>High school diploma, Maseno School</b> Graduated top of class with A (Plain) with 83 out 84 points	Kisumu, Kenya
Jan 2021 — Apr 2021	<b>Data Science Picodegree, Huru School</b> Graduated with Honors	Vermont, US

---

## LANGUAGES

English	French
Kiswahili	

---

## FREELANCE WORK

Jan 2007 — Sep 2008	<b>Untrained Teacher - Achego Girls Secondary School (Muhoroni District)</b> Taught Mathematics, Physics, Chemistry, Business Studies and Biology in the school as I waited Campus Admission <a href="https://ke.linkedin.com/company/united-latino-students-association">https://ke.linkedin.com/company/united-latino-students-association</a>	
Apr 2021	<b>Data Science Tutor, Huru School</b> <ul style="list-style-type: none"><li>• Develop and maintain the Data Science syllabus for the organization, keeping up with the latest innovations of the Data Science field.</li><li>• Develop and maintain R/Python/Julia/SQL/Apache Spark/ scripts and codes for use during the classes.</li><li>• Deliver practical data science lectures for at least 4.5 hours a week for a 4 month Picodegree course.</li><li>• Give weekly assessments and report feedback to students on a weekly basis.</li></ul>	Vermont, US

---

## SKILLS

Leadership	Expert	Microsoft Excel	Expert
Data Analysis	Expert	Microsoft Office	Expert
Python Programming	Expert	Data Mining	Expert
Machine Learning	Expert	Data Engineering	Expert
SQL	Expert	Google Cloud Platform	Expert
Communication Skills	Expert	Amazon AWS	Expert

---

## CERTIFICATIONS

Jan 2021 — Apr 2021	<b>Data Science Pico Degree, Huru School</b>
---------------------	----------------------------------------------

---

## REFERENCES

<b>Herman Chege from Huru School</b> chegeherman@gmail.com · +254721733354
<b>Patrick Ogangah from Standard Media Group</b> ogangahnaftali@gmail.com · +254722982410

---

## EXTRA-CURRICULAR ACTIVITIES

