SILAS MUGAMBI MUNGIRIA

Software Engineer

Contact Information	Portfolio	Social Media
Email: mungiria8@gmaill.com	**GitHub**: Mugambi12	**LinkedIn**: Silas Mugambi Mungiria
Phone: (+254) 723 396 403	**Dev.to Blogs**: Silas Mugambi	**Twitter**: Silas Mugambi

Summary

Versatile Software Engineer with a strong understanding of **software design, architecture, algorithms,** and **data structures**. Leveraging extensive experience in data analytics, I bring a unique blend of analytical and full-stack development skills. Proficient in **Python** and **C** and currently learning Java, I am eager to contribute my diverse expertise to innovative software engineering projects.

Core Competencies

- **Software Design & Architecture:** Proficient in crafting scalable and maintainable software solutions, with a keen eye for elegant design and robust architecture.

- **Algorithms & Data Structures:** Strong background in designing and implementing efficient algorithms and data structures for optimal system performance.

- **Mathematics:** In-depth understanding and application of mathematical concepts to solve complex problems and optimize software solutions.

- **Full-Stack Development:** Experience in end-to-end development, including front-end technologies (HTML, CSS, JavaScript) and back-end frameworks (Flask, Django).

- **Database Management:** Skilled in database design and management, including MySQL and SQLite.

- **Collaborative Problem-Solving:** Proven ability to analyze and solve complex problems collaboratively, fostering a team-oriented approach to project success.

- **Data Science Expertise:** Extensive experience in data analysis, statistical techniques, data visualization and machine learning algorithms.

Projects

1. **Loan Management System.**
   - Tech Stack: Flask, Python, Bootstrap, JavaScript, CSS, HTML, Jinja2
   - Developed a Flask-based web application for efficient loan management.
   - Implemented user authentication, role-based access control, and admin panel features.
   - Streamlined loan operations and membership verification processes.

View Project: [Loan Management System](#)

2. **ALX Assistance ChatBot.**
   - Tech Stack: Flask, Python, HTML, CSS, JavaScript
   - A web application combining a chatbot with weather information retrieval.
   - Users can seamlessly seek comprehensive customer experience assistance, including inquiries about courses and more and obtain real-time weather information for specific cities.
   - Responsive design for seamless user experience on various devices.

   View Project: [ALX Assistance ChatBot](#).

3. **Venter Mwongera's Portfolio Website.**
   - Tech Stack: HTML, CSS, JavaScript, Swiper.js
   - Developed a fully responsive personal portfolio website for Venter Mwongera.
   - Showcased expertise in strategic communications, journalism, and NGO collaboration.
   - Features sections such as Home, About, Portfolio, Skills, Contact, and Blog.

   View Project: [Venter Mwongera's Portfolio Website](#)

4. **Customer Lifetime Value Analysis (Python, Data Visualization).**
   - Estimated CLV using Python, aiding investment decisions.
   - Analyzed acquisition cost, identified profitable channels.
   - Utilized Plotly for visual insights.
   - Highlighted expertise in Python, analytics, and visualization.

   View project: [Customer Lifetime Value Analysis.](#)

5. **Twitter Sentiment Analysis (Python, NLP).**
   - Classified tweets (positive, negative, neutral) with Python.
   - Employed TF-IDF and ML classifiers.
   - Evaluated accuracy, used Matplotlib for visualization.
   - Demonstrated NLP and data analysis proficiency.

   View project: [Twitter Sentiment Analysis.](#)

6. **RFM Analysis (Python, Data Segmentation).**
   - Conducted RFM Analysis to segment customers.
   - Utilized Recency, Frequency, and Monetary metrics.

- Visualized results using Plotly.

- Highlighted segmentation and data analysis skills.

View the project: [RFM Analysis using Python.](#)

Experience

Freelance Web Developer

Jan 2022 - Current

Developed and maintained websites for diverse clients, enhancing online presence and user engagement. Delivered customized web solutions, provided ongoing technical support, and contributed to elevated client satisfaction.

Alpine GoodLife.

Data Analyst - Jul 2022 – Nov 2023.

In this pivotal role, I leveraged data-driven insights to enhance academic writing services and contribute to informed decision-making. Responsibilities included optimizing data processing pipelines, collaborating with cross-functional teams, and ensuring compliance with privacy regulations. Achievements include a 20% boost in writer productivity, a 15% increase in customer satisfaction, and strategic collaboration leading to a 10% revenue growth. Recognized as Employee of the Month in Nov 2022.

Education

ALX_Africa Jan 2023 - Jan 2024

Nanodegree in Software Engineering.

University of Embu Sep 2017 - Sep 2021

Bachelor of Education Science (Mathematics & Physics).

Languages

- **English** – Fluent.

- **Swahili** – Fluent.

- **Deutsch**– Intermediary.

Referees:

1. Mr. Stanley Mwenda,

    Title: Tax Analyst,

    Company: TaxWise Africa Consulting LLP,

    Contact Info: +254 742 531 792.

2. Dr. Gervacio Miriti,

    Title: Lecturer,

    Institution: Chuka University,

    Contact Info: +254 721 827 610.

3. Mr. Douglas Omweri,

    Title: Software Engineer,

    Institution: University of Embu,

    Contact Info: +254 726 550 016.