# LEWISMSASAJR

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# PERSONAL STATEMENT

I am a very skilled software engineer with 5+ years of experience skilled in Backend Software Development, Enterprise Architecture, Project Management, and Enterprise IT Governance.

As a Software Engineer, I am skilled in Backend development; I am conversant with the .NET Framework (C#), Golang, Python and Laravel (PHP). Apart from that, I do mobile application development and comfortably work with Android jetpack compose and Flutter. I am also a bit conversant with Front-end development using React JS (Typescript) and .NET Blazor. In terms of Databases, I work with both SQL (MSSQL and MySQL) and NoSQL (MongoDB and Cassandra) databases. For CI/CD, I work with Docker and Kubernetes for Containerization and orchestration and Git and Git actions for version control and Continuous Integration.

I am also a TOGAF certified Enterprise Architect. Through the TOGAF standard I am knowledgeable in **stakeholder management** and **communication**, architecture implementation governance and **architecture change management**. I am also **PMP(Project Management Professional) Certified**, **COBIT 2019 Design and Implementation**Certified which equips me with IT Enterprise Governance.

Apart from technical skills, I work on giving back to my community. I mentor college/university students, helping them to do excellently in their academics and to excel in building their careers. I love reading books and I utilize any opportunity to learn, especially from others.

#### **WORK HISTORY**

# **Solutions Architect** / NBS Bank Plc

OCTOBER 2022 – AUGUST 2023

In this role, my responsibility involved coming up with software architecture for all projects and ensuring that all projects are adhering to the Enterprise Architecture. The role also includes leading a team of developers; coaching, mentorship and ensuring projects are delivered on time.

# Key achievement:

- Rearchitecting all Bank's Value-added services to use CI/CD which improved the time to market for bank products. Reduced technical debt by 60%
- Developed C# libraries that reduced development time of integrations(web APIs) from one week to a day. This led to improvement in go-live time.
- Developed a cloud migration strategy for the bank as a technical lead.
- Rewrote legacy code to include Unit Tests; rewrote at least 10 APIs for easy maintainability.

# **Digital Transformation Lead / NICO GROUP**

NOVEMBER 2022 - AUGUST 2023

I take a leading role in a NICO Group Digital Innovation Centre of Excellence. In the COE, I am responsible for coming up with digital transformation strategies for the Nico Group which includes NBS Bank Plc, NICO Technologies, and NICO Life Pensions.

# Enterprise Architect Lead – Core Banking Project / NBS BANK

JANUARY 2023 – AUGUST 2023

Helping in a project where the bank was changing to another Core Banking System. I am providing insight on Enterprise Architecture for the project to ensure consistency and stability.

# Key achievement:

- Developed a Baseline architecture for all systems depended on the Core Banking System which fed into a migration project from T24 to Flexcube.
- Offered technical advice from the architectural perspective

# **Cloud Migration Technical Lead / NBS BANK**

JANUARY 2023 - AUGUST 2023

Helping NBS Bank Plc to migrate to the cloud by giving technical input to the project.

### Key achievement:

- ✓ Creating and designing a new architecture for the Bank's systems. This involves formulating an architecture that will allow expansion, responsiveness to change and adherence to current software development standards.
- ✓ Helped the bank in the cloud migration strategy designing and implementation.

# Solutions Developer / NBS Bank Plc

APRIL 2022 – DECEMBER 2022

Responsible for integrating third party services with the Core Banking Systems. Also responsible for developing platforms for bank users to interact with the bank's financial services.

# Key achievement:

✓ Value Added Services Microservices – Led a project of developing microservices for billers and value added services for the bank that allowed different front-ends to interact with the core banking system.

Technologies used: C#, RabbitMQ, Ocelot Gateway, Mediatr, MSSQL, MongoDB, XUnit, Docker, Kubernetes, OpenTelemetry, Identity Server

✓ Automated Merchant Settlements – Led a project on Developing a system that automates commission settlement for the bank's merchants.

Skills used : RabbitMQ · Apache Kafka · React.js · C# · Microsoft SQL Server · Software Architecture · Agile Project Management.

# **System Developer** / NBS Bank Plc

OCTOBER 2018 - APRIL 2022

Responsible for integrating third party services with the Core Banking Systems. Also responsible for developing platforms for bank users to interact with the bank's financial services.

# Key achievement:

✓ NBS Bank First Mobile Application - I Led the project team that developed the first Mobile app for NBS Bank. The mobile app allowed customers to pay bills, transfer money, apply for Debit cards etc through the mobile platform.

Technologies used: C#, Xamarin Mobile

- ✓ Merchant QR Code payments I led a project on developing a platform that allowed customers to pay merchants in stores using QR codes; making the payments contactless through the mobile app.
- ✓ Biometric Identification Project Led a project on developing an API that integrated a system that allows customers to use face identification and National ID validation.
- ✓ SMS Gateway Developed a gateway that allowed banking systems to send SMSs to customers in a faster way; 5X faster than the old one. This allowed the bank to improve customer experience for services that required One Time Pins.
- ✓ USSD Group savings platforms for rural areas Built a platform called Tidalilane (Let's depend on each other) that allowed people in rural areas to save money as groups as a way of promoting financial inclusion. The product reached at least 4,000 in rural areas

# **Senior Software Engineer / NITEL**

SEPTEMBER 2018 - OCTOBER 2018

Responsible for developing services for the company's clients and leading a team of developers.

Key achievement:

Developed the architecture for Malpay (Malawi Payments)- a system that works as a payment aggregator.

Senior Software Engineer / NITEL SEPTEMBER 2018 – OCTOBER 2018

Responsible for developing services for the company's clients and leading a team of developers.

### Key achievement:

Developed the architecture for Malpay (Malawi Payments)- a system that works as a payment aggregator.

# Part-Time Lecturer in Computer Programming / MUBAS - Part time

SEPTEMBER 2017 - FEBRUARY 2018

Worked as a part time lecturer teaching programming in C++.

Responsible for

- 1. Preparing and delivering lectures
- 2. Marking and grading papers

Key achievement:

Delivering lectures and grading examination papers.

**Researcher** / Malawi University of Business and Applied Sciences MAY 2024 – PRESENT

Help with research at the AI Lab. This includes ideation, field research and working with stakeholders.

### Key achievement:

- Created a dataset for computer vision natural disaster damage classification and building detection. This involves annotating/labeling images pre-disaster and post disaster. Build a model to test the dataset.

#### JANUARY 2024 - PRESENT

Teaching Assistant for a Digital Transformation for Global Development course and my roles involve tutoring students in data manipulation using R and Python, Grading assignments written in R and Python and configuring CircuitPy microcontrollers.

# **Teaching Assistant** / UC Berkeley, Blum Center for Developing Economies JANUARY 2024 – PRESENT

Teaching Assistant for a Digital Transformation for Global Development course and my roles involve tutoring students in data manipulation using R and Python, Grading assignments written in R and Python and configuring CircuitPy microcontrollers.

# **Teaching Assistant** / UC Berkeley, Department of Chemistry SEPTEMBER 2023 – DECEMBER 2023

In this role my roles included tutoring students in software engineering practices using C++, grading assignments, organizing and collaborating online classes.

# **Mentor/Founder** / DeepLife Mentorship Program JANUARY 2020 – DATE

We mentor college students in different aspects of life.

- 1. Help students to achieve academic excellence
- 2. Train students in soft skills

### Key achievement:

- ✓ Trained more than 500 college students in Leadership, Excellence and Purpose.
- ✔ Organize conferences called "Fire For Your Future" for final year students

These conferences prepare final year college students for life after college. We engage them on how to approach entrepreneurship, career development, going for further studies, and how to be people of integrity and impact in their community.

✔ Organize conferences called "Hello Future" for first year students

Through these conferences, we help students to balance their college lives and to have a big picture about their lives. We engage them on how they can achieve academic excellence whilst being active in beneficial extra-curricular activities.

# **Founder** / Technify Malawi Program AUGUST 2018 – DATE

An initiative that involves increasing access to ICT among the underprivileged youths. We mobilize and donate computers in secondary schools.

# Key achievement:

- ✓ Donated Computers at St Martin Open Day Secondary School the computers helped the school to introduce computer studies and reduce absenteeism
- ✔ Donated computers at Neno Girls Secondary School

# **EDUCATION**

# MASTER'S DEGREE IN INFORMATION MANAGEMENT AND SYSTEMS / University of California, Berkeley

Focusing on Machine Learning and Product Management. Learned Machine Learning, Big Data for development, Data Engineering, Optimization Models in Engineering, Quantitative and Qualitative Research Methods.

# BACHELOR'S DEGREE IN INFORMATION TECHNOLOGY / University of Malawi

This **degree** equipped me with Information Technology skills. I learnt programming, information system management, database management and network administration. With these skills, I can ably manage IT systems.

# PMI PROJECT MANAGEMENT PROFESSIONAL (PMP) CERTIFICATE

This **certificate** is a verification of my project management skills. Studying for this certification helped me to be familiar with the **Project Management** Book Of Knowledge (PMBOK) and Project Management best practices. I am equipped to manage both predictive and adaptive projects.

#### **COBIT** ENTERPRISE IT GOVERNANCE/ DESIGN & IMPLEMENTATION

COBIT equips me to design, implement and govern **Enterprise I & T Governance**. Through COBIT, I learned enterprise goal cascading, aligning the **IT strategy** with the **corporate strategy and goals**, **stakeholder management** and communication.

# **COBIT ENTERPRISE IT GOVERNANCE/ FOUNDATION**

COBIT equips me to design, implement and govern **Enterprise I & T Governance**. Through COBIT, I learned enterprise goal cascading, aligning the IT strategy with the corporate strategy and goals, stakeholder management and communication.

#### **ITIL4 /FOUNDATION**

ITIL4 Foundation equips me with the concepts of IT service Management. Through this, I am familiar with Service Value System processes e.g. Continual Improvement, Relationship Management, Supplier Management, Knowledge Management, Problem Management and service design.

# TOGAF ENTERPRISE ARCHITECTURE CERTIFICATE / CERTIFIED

TOGAF equips me to design, implement and govern **Enterprise Architecture**. Through TOGAF, I learned stakeholder management, communication, architecture implementation governance and architecture change management.

### **SKILLS**

- Software Engineering I am a skilled backend developer (mostly working with Golang and .NET core) and I am conversant with frontend development (React.js, .NET Blazor) and mobile application development (Android, React Native, Flutter). I am also a Blockchain Developer (skilled in Hyperledger Fabric).
- Project Management I am skilled in Project Management, a member of Project Management Institute and

- PMP Certified. Through PMP, I am conversant with the PMBOK which includes Cost Management, Schedule Management, Stakeholder Management, Risk Management and Quality Management.
- Change Enablement and Change Management Being conversant with Project Management and IT Enterprise Governance (COBIT certified), I am familiar with Change Management and Change Enablement when implementing projects.
- Enterprise Governance Through COBIT, which I am certified in at Design and Implementation Level, I am familiar with Enterprise Governance especially in IT. This includes change control and governance skills
- Enterprise Architecture Through TOGAF, which I am certified in, I am skilled in Enterprise Architecture. This equips me in helping enterprises build IT systems that are structured to align with the business strategy and promote responsiveness to change, agility and resilience.

# HOBBIES AND INTEREST S

- I am an astute reader and a lover of knowledge; I read both extensively and intensively especially in the technology space.
- I also enjoy listening and composing music. I taught myself the guitar and the piano.

# REFERENCES

DANIEL WILSON, PROFESSOR, BLUM CENTER, UC BERKELEY.

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