MUZINGAYE NKALA

DATA ARCHITECT

LEVEL: Senior
AVAILABILITY: 30 Days
EXPERIENCE: 15 Years
LOCATION: JHB

- Muzi currently holds a BSc (Hons) in Business Computing and Information Systems. Has vast experience working in the Financial services, IT services and Software Development Industries
- Muzi is a seasoned Data Architect with vast experience in statistical modelling, machine learning, Hadoop ecosystem and cloud technologies. He boasts vast experience in building data pipelines, ETL workflows and analytics dashboards on the cloud on AWS and AZURE
- He has over a decade of experience building data warehouses, data lakes and ETL pipelines

EDUCATION

University of Central Lancashire, BSc (Hons): Business Computing and Information Systems, 2013

TRAINING

International Computer Driving License
International Certificate in Computer Studies

INDUSTRIES

Financial Services
IT Services and IT Consulting
Software Development

CAREER CHRONOLOGY
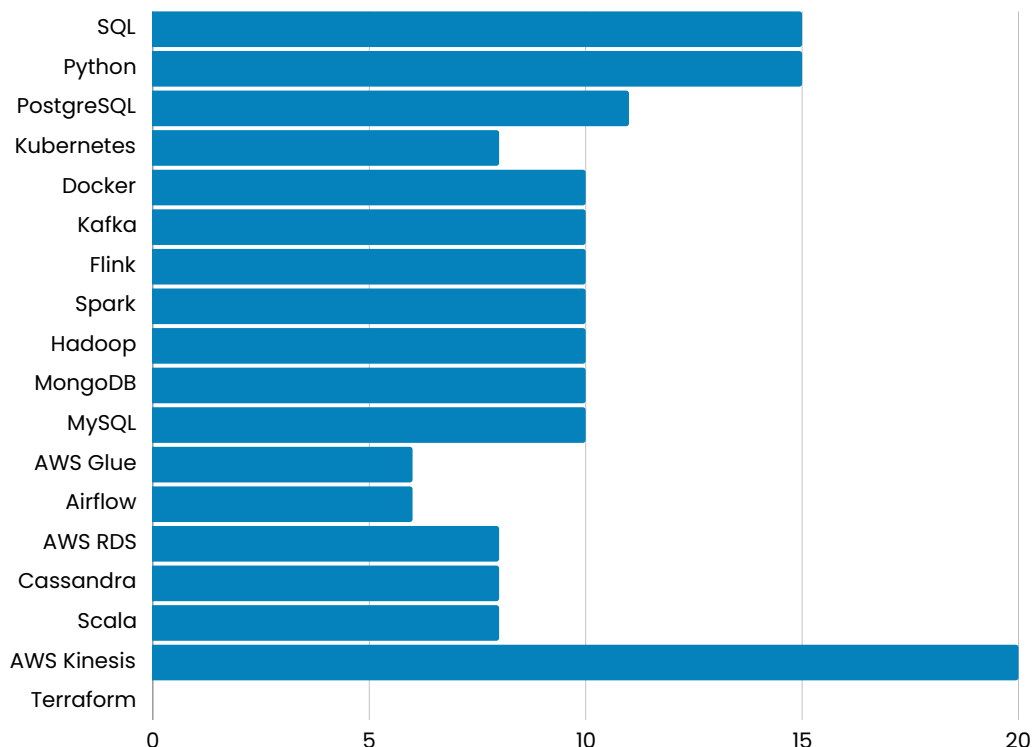
Standard Bank, Senior Data Architect
2020 - Current

EOH Technologies (IOCO), Senior Data Architect
2019 - 2020

Newalk Systems, Senior Engineer
2018 - 2019

Bengo Systems, Intermediate Engineer
2017 - 2018

K&N Accounting, In-house Developer
2014 - 2017

SKILLS MATRIX

Skill	Rating
SQL	15
Python	15
PostgreSQL	11
Kubernetes	8
Docker	10
Kafka	10
Flink	10
Spark	10
Hadoop	10
MongoDB	10
MySQL	10
AWS Glue	6
Airflow	6
AWS RDS	8
Cassandra	8
Scala	8
AWS Kinesis	20
Terraform	0

EMPLOYMENT DETAILS

Standard Bank
Senior Data Architect
2020 - Current

TOP 3 TOOLS USED
- AWS Redshift
- Azure Sinapse
- Snowflake

Responsibilities:

- Cloud migration from SQL server on prem instance to cloud
- Built data warehouses in AWS Redshift, Azure Sinapse and Snowflake
- Architected out different models for warehouses from fact dimension to vault model
- Built staging layer data lake for all these warehouses
- Built semantic layer for different use cases such as reporting and predictive analytics
- Built predictive models for the IB business
- Involved in building of DCM digitalization platform called Credit Connect

EOH Technologies (iOCO)
Senior Engineer
2019 - 2020

TOP 3 TOOLS USED
- ASP .NET
- Angular
- SQL

Responsibilities:

- Developer on a banking system both web and mobile for an international bank
- APIs developed in ASP.NET
- Web platform built in Angular 7
- Database built in SQL and entity framework
- Mobile app built in Xamarin forms

Newalk Systems
Senior Engineer
2018 - 2019

TOP 3 TOOLS USED
- JavaScript
- Java
- NoSQL

Responsibilities:

- Lead developer on a financial securities trading platform
- Mostly use JavaScript frameworks such as react, angular and aurelia
- System Interacts with JSE
- Database is mostly NoSQL frameworks such as firebase and MongoDB
- Installed and configured MapReduce, HIVE and the HDFS; implemented CDH3 Hadoop cluster on CentOS
- Assisted with performance tuning and monitoring
- Created HBase tables to load large sets of structured, semi-structured and unstructured data coming from UNIX, NoSQL and a variety of portfolios
- Supported code/design analysis, strategy development and project planning
- Created reports for the BI team using Sqoop to export data into HDFS and Hive
- Developed multiple MapReduce jobs in Java for data cleaning and preprocessing
- Assisted with data capacity planning and node forecasting
- Collaborated with the infrastructure, network, database, application and BI teams to ensure data quality and availability
- Administrator for Pig, Hive and HBase installing updates, patches and upgrades

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EMPLOYMENT DETAILS

Bengo Systems
Intermediate Engineer
2017 - 2018

TOP 2 TOOLS USED
- Python
- Hadoop

Responsibilities:

- Lead developer on a medical app called Mipha
- Built machine vision systems using deep learning in python
- Developed MapReduce programs to parse the raw data, populate staging tables and store the refined data in partitioned tables in the EDW
- Created Hive queries that helped market analysts spot emerging trends by comparing fresh data with EDW reference tables and historical metrics
- Enabled speedy reviews and first mover advantages by using Oozie to automate data loading into the Hadoop Distributed File System and PIG to pre-process the data
- Provided design recommendations and thought leadership to sponsors/stakeholders that improved review processes and resolved technical problems
- Managed and reviewed Hadoop log files
- Tested raw data and executed performance scripts
- Shared responsibility for administration of Hadoop, Hive and Pig

K&N Accounting
In-house Developer
2014 - 2017

TOP 3 TOOLS USED
- Hadoop
- Sqoop
- ZooKeeper

Responsibilities:

- Worked on analysing Hadoop cluster and different big data analytic tools including Pig HBase database and Sqoop
- Responsible for building scalable distributed data solutions using Hadoop
- Installed and configured Flume Hive Pig Sqoop HBase on the Hadoop cluster
- Managing and scheduling Jobs on a Hadoop cluster
- Resource management of HADOOP Cluster including adding/removing cluster nodes for maintenance and capacity needs
- Involved in loading data from UNIX file system to HDFS
- Created HBase tables to store variable data formats of PII data coming from different
- portfolios
- Implemented best income logic using Pig scripts
- Implemented test scripts to support test driven development and continuous integration
- Responsible to manage data coming from different sources.
- Installed and configured Hive and written Hive UDFs
- Experienced on loading and transforming of large sets of structured semi-structured and unstructured data
- Cluster coordination services through Zookeeper
- Experience in managing and reviewing Hadoop log files
- Exported the analysed data to the relational databases using Sqoop for visualization and to generate reports for the BI team
- Analysed large amounts of data sets to determine optimal way to aggregate and report on it
- Supported in setting up QA environment and updating configurations for implementing scripts with Pig and Sqoop

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