

BRIAN ONSINDE NYACHAE

SOFTWARE ENGINEER 📍 NAIROBI, 00100, KENYA ☎️ 0716047682

Contact DETAILS

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Nairobi, 00100

Kenya

[portfolio website](#)

[Email](#)

Date / Place of birth

12/05/1998

Kisii

Nationality

Kenyan

◦ PROJECTS ◦

[Swift Payment Service](#)

[Posta Lastmile Service](#)

[VastWriters](#)

[Passport Portal](#)

[ChecheFlower](#)

◦ SKILLS ◦

Python

GraphQL

Apache Spark

Ruby on rails

Machine Learning

Web Scrapping

Python Dash

Plotly

HBASE

Golang

NEO4J

RESTFUL API Development

Agile Software Development

Code Review

AWS

HTML/CSS/JavaScript

REACTJS

Data Engineering

RabbitMQ

SQL



PROFILE

Experienced full-stack software engineer with expertise in Android applications, web development, and data analysis from concept to implementation. Collaboration and communication skills are required to deliver software features and products that meet customer expectations. Experienced in developing data pipelines, analytic systems, and business intelligence. To working as a collaborative and positive team member, striving to utilize my knowledge and expertise for optimal engineering results.



EMPLOYMENT HISTORY

Machine Learning Engineer (Collaborator) at Omdena, Nairobi

April 2022 — Present

Omdena is a collaborative platform that brings together all levels of AI and Machine Learning professionals to collaborate and build solution that impact various problems in the society. I have been part of two collaborative projects so far one involving building a Deep Learning chatbot model to help act as a virtual customer support for a University portal. The other involves creating a virtual psychologist assistant for under the project name Litha:

My responsibilities included but not limited to:

- Part of the team that performed Language Sequence modeling.
- Using TensorFlow to create the language base models.
- Using Airflow to automate the ETL processes involved in data
- Configuring and Writing API to interacting with Neo4j graph databases.
- Creating the application server using FastAPI.
- Writing unit and integration tests.
- Writing MLOPs pipelines that helps with handling automatic training and storing of current model metadata.
- Writing containerization workflows in Docker for the entire application.
- Writing DagsHub workflows.

Software Engineer II at Cimeza Africa, Nairobi

January 2021 — Present

Cimeza Africa ltd is a company in Kenya that provides clients with software engineering services and gateways of integrating and using different Telecommunication company services in Kenya and across the World. The products under FocusMobile are BulkSMS offered under cimeza-africa.com which provides clients with the ability to send bulk SMS to different clients all over the world. The platform is also multi-language supporting English, Swahili and French. They also offer means of raising Sender ID and Short Codes with various telecommunication companies integrated with the platform as well as conducting surveys.

My responsibilities included but not limited to:

- Building highly scalable back-end APIs in ruby on rails and Golang using Hexagonal and microservice architectural approach to support our client-base when terminating messages to countries all over the world.
- Writing unit, functional and integration tests to validate correctness of features being developed.
- Created and actively maintaining the internal spam and fraud detection machine learning engine.
- Maintain our internal admin and customer experience portal using **Python (Django)**
- Writing CI/CD Pipelines for our admin and customer experience portal to improve the experience of deploying features from development.

Data Scrapping and Wrangling

Data Visualization

MongoDB

Database Management

Database Development

Database Design

Microsoft Visio

IIS Server

Apollo Server

Celery

◦ LANGUAGES ◦

English

Kiswahili

◦ HOBBIES ◦

Reading Novels, cycling, skating.

Gaming, working out.

Learning new skills.

Spending time with family.

- Writing AWS lambda functions and cron jobs to handle automatic back up of our client data from PostgreSQL into Maria DB database
- Writing data pipeline that's used to display analytics on internal admin portal as well as customer experience portal.
- Automating ETL data pipelines process using Airflow, Docker, Python Operators and Bash Operators.
- Writing AMPQ Logic on RabbitMQ using worker approach (Producer-Consumer Approach) to queue and retry the vast amount of messages and surveys that are being sent by the platform as well queue all the delivery reports that are being sent over to our callbacks from the telcos.
- Writing scripts to perform factor analysis on Kibana Logs when doing root-cause analysis for some errors that occur.
- Reviewing peers pull requests as well as approval of pull requests.

Skills applied in the daily works are Golang, gRPC, RabbitMQ, CentOS, NGINX, Caddy, Kibana Kubernettes, Spark, Docker, Docker Swarm, Redis, Jenkins, PostgreSQL, MariaDB, S3, Git, GitHub, Testing, Python, Airflow, ETL Pipelines, and Data Analytics

Systems Developer II at Postal Corporation of Kenya (Contract), Nairobi

March 2021 — February 2021

My responsibilities included but not limited to:

- Part of the team that developed the lastmile delivery solution for helping the organization to perform door to door delivery for postal items at the door of clients through mobile and web based applications. The lastmile.com site gives clients ability to order for delivery, postal items like e-commerce items shipped from abroad, passports, letters pick-and-drop items. Riders are automatically assigned on payments based on their routes of operation. The lastmile was developed using different technologies like Python Django for clients facing side, Golang for the admin dashboard as well as the automation algorithms to determine rider routes and rider assignments. The payments modules and callbacks processing was developed using golang, concurrency and RabbitMQ to handle huge amounts of payments requests coming in.
- Part of the team that developed the passport delivery portal passport.com which is a solution that enabled clients to book for delivery of their passports to their nearest post office from all over the country. The passport postal is also developed using different technologies like PHP for the client facing side and flask micro-framework for the admin facing side.
- Building integration micro-services to enable communication of the standalone applications to communicate with the internal ERP systems using broker, gRPC and RPC protocols. This included enhancing components or ERP protocols To streamline the communication and data sharing bottlenecks between the micro-services being developed and the legacy based ERP system.
- Developing data pipelines to support the business analytics team to report on the performance metrics of services being rendered.
- Creating, configuring and managing VPS Instances on Konza Technopolis Cloud platform to host and automatically handle backups and scalability of new Micro-services being developed. These included writing groovy yaml files to help in deployment of code base changes into the servers using Jenkins.
- Creating, Configuring and Management of MySQL/PostgreSQL Database Servers.
- Setting up Docker containers for development and ease of dependencies management, system development and deployment.

Skills applied in the daily works are RabbitMQ, IIS, NGINX, Django, PHP, Groovy, Jenkins, Flask, Apache Spark, Docker, Redis, Celery, PostgreSQL, AWS, Git, GitHub and NodeJS

Lead Data Engineer at Pay Hero Kenya Ltd, Nairobi

October 2019 — December 2021

Pay Hero Kenya Limited is a start-app company that offers payment services, airtime and software solutions to Small and Medium Enterprises. It gives customers ability to

Integrate to their wallets through APIs enabling them to collect payments from their own applications and websites. Customers also have a dashboard which they can manage their payments through, withdrawals, wallet funding, generating invoices and offering refunds. As the Lead Data Engineer my role at Pay Hero included but not limited to:

- Constantly researching on technology stack that can be used by the company to improve on performance efficiency to better serve clients.
- Setting up analytics platform architecture such as HBase, Airflow and Dash as well as setting up resource monitoring tools such as Prometheus
- Designing and development of our database architecture as well as our data warehouse, data marts and Analytics pipelines that we use in analyzing and reporting on our KPI's as well predictions on our future performance.
- Developing internal analytics dashboards using Airflow, Pandas, Numpy and Dash.
- Generating and writing IT Reports during AGM Meetings between Directors.
- Reviewing and approving peer pull requests.
- Implementing our internal development tools like our payments integration library, our queuing systems and our callbacks processing service.
- Creating the tests framework that is used internally as a company
- Design and development of the core payment module **Swift Payment Service (<https://payherokenya.com/sps-app/home>)** Databases.
- Design and development of the **SPS Admin Portal** and **Customer Payments Portal**.
- Integration of Push notification module to send scheduled reminders to system users.
- Implementation of Invoice Tracking Module.
- Configuration and Management of Application Servers.
- Design and development of various payment and withdrawal gateways. (PayPal, Cards, M-Pesa and iPay).
- Integration and Configuration of the **SPS API** Documentation for developers and customers who needs integration.
- Taking customer change requests to device an SRS to help determine improvements that can be made for better User experience.
- Offering support to customer on issues that they experience while using the systems.
- Continued Configuration and Improvement of the system.

Skills applied in the daily are System Design, Feature Documentation, Customer Support, RabbitMQ, UbuntuOS, Caddy, Log Analysis, Kibana, Kubernettes, Docker, Docker Hub, Docker Swarm, Redis, Jenkins, PostgreSQL, MariaDB, AWS S3, Git, GitHub, Git Actions, Testing, PHP, Airflow, ETL Pipelines, UI/UX Design, Analytics Dashboarding and Golang.

Software Developer at Obotech Solutions, Nairobi

July 2017 — October 2019

My responsibilities included but not limited to:

- Designed, developed and managed of database management systems from customer requirement specifications.
- Developed modules that were used by back-end engineers to develop back-end systems for existing customer software.
- Part of the team that developed SRS and Conceptual systems designs based on clients systems needs.
- Setup and managed the version control throughout the cycle of system development for clients using Git and GitHub.
- Developed of RESTFUL APIs to be consumed by Web and Mobile developers.
- Developed and Maintained internal client notification and invoicing software

Skills applied in the daily work are Laravel, MySQL, SSL Configuration, HTML, CSS, VueJS, Flask, MsVisio, GitHub and Git

IT Support at PCA ICT Center, Nairobi

March 2017 — December 2018

My responsibilities included but not limited to:

- Operating systems installation and repair
- Hardware and Software diagnosis.
- Worked together with clients to order hardware and software that met their requirements.
- Management of Hardware and software installations for Cybercafé clients.
- Training of juniors on router configuration, OS installation, and hardware diagnosis.
- Trained Computer Certification on Microsoft Office application and Introduction to Website Design in HTML and CSS.



EDUCATION

Remote Full Stack Web Development Program - microverse

September 2021 — Present

Currently undertaking my masters in **Data Analytics** at **KCA University** majoring in **Machine Learning** and **Data Engineering**.

Bachelor of Accounts, Taita Taveta University, Taita

October 2017 — December 2021

During this period I was studying for a Bachelor's degree in commerce from Taita Taveta University and graduated with a Second Class Honors (Upper Division).

Moringa School, Nairobi

February 2020 — November 2021

Achieved distinction mark in full stack software development-



COURSES

AWS Machine Learning Nano Degree, Udacity

August 2022 — November 2022

Full-stack Web Development, Microverse

November 2020 — March 2021

Automating Boring Stuffs with Python Course, Udemy

November 2021 — March 2021

AWS Certified Cloud Practioner, Udemy

November 2020 — March 2021

Scrum Fundamentals, Udemy

November 2021 — March 2021



EXTRA-CURRICULAR ACTIVITIES

Tennis at Mwingori High School, Kisii

January 2015 — June 2019

I was a tennis player for mwingori High through the year 2015 gaming competitions for high schools and secondary schools.



REFERENCES

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