

**BRIAN NDEGWA**

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**PROFESSIONAL SUMMARY**

Highly motivated and results-oriented IT professional with 5+ years of experience in system development, network administration, and artificial intelligence. Skilled in various programming languages (C, Python, Java) and frameworks (Django,React,Sencha.js, Node.JS,React Native), adept at project management and fostering teamwork. Proven ability to design and implement innovative solutions, such as RONA (a virtual assistant to combat misinformation) which gained national recognition. Enthusiastic about leveraging expertise to contribute to a dynamic and impactful organization.

**PROFESSIONAL EXPERIENCE**

**NYENA SACCO Nyeri, Kenya**

**IT Consultant 2020-2024**

**Lead IT Associate 2018-2020**

Launched Nakuru office with Chief Of Operations and the Sacco chairman and recruited a new team of 10 employees;. Led redesign of mobile app and website. Promoted within 15 months due to strong performance and organizational impact (one year ahead of schedule).

* **Led the digitalization of all records** to achieve 90% paperless transactions, streamlining data access and retrieval.
* Set up a secure and efficient office network for improved communication across all departments, and 100% connectivity
* **Developed and maintained the SACCO Management System**, which processes data of 1000+ members.
* **Spearheaded a major restructure** as the sacco became more digital centric, by delegating various IT duties and conducting training to different staff resulting to an 80% decrease in the average processing time per client from 15 minutes to 3 minutes

**IBM Nairobi, Kenya**

**Campus Ambassador 2019-Present**

First ever IBM Campus Ambassador for Dedan Kimathi University of Technology

* **Launched the IBM Innovation Club:** As a Campus Ambassador for IBM in Nairobi, I spearheaded the creation of a thriving IBM Innovation club at DeKUT, which saw over 200 students joining within the first year of inception
* **Empowering Students with Industry-Ready Skills:** The club bridges the gap between academia and the real world, allowing students to acquire sought-after tech skills through the IBM Digital Nations Africa Platform.
* **Building a Culture of Innovation:** I fostered an environment where students can translate their learning into practical solutions for real-world problems. This fostered a spirit of innovation and problem-solving within the club.  
  pen\_spark
* **Event organizing:** Oversaw the collaboration with other tech clubs in the university and successfully held over 9 successful hackathon and Capture The Flag Competitions

**CLUB LUXURIOUS IBIZA Nyeri, Kenya**

**IT Specialist 2019-2020**

**Club Promoter & Night Guard 2019**

* **Optimized club management:** Designed and maintained a club management system, streamlining operations and enhancing efficiency.
* **Improved booking processes:** Developed and implemented a lodging reservation system, making the booking process more user-friendly and efficient.
* **Enhanced security measures:** Oversaw the installation of CCTV cameras, contributing to a safer and more secure environment for guests and staff.

**EDUCATION**

**DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY Nyeri, Kenya**

***Bachelor of Science in Information Technology* 2018-2024**

* Major: Project Management and Systems Development

**CISCO ACADEMY Nyeri, Kenya**

***CCNA1 AND CCNA2(Cisco Certified Network Associate)* 2018-2019**

**IBM SKILLS ACADEMY Nairobi, Kenya**

***Artificial Intelligence/Machine Learning Analysis(Mastery Award)* 2018-2019**

**EMOBILIS MOBILE TECHNOLOGY TRAINING INSTITUTE Nairobi,Kenya**

***Web and Mobile App development (HTML, CSS, JS, Python, JAVA)* 2017-2018**

**PROJECTS**

**2018: iHome Ke** — ***HTML,CSS, PYTHON, JS, MYSQL.***

A web project I developed while in my First Year in Campus, to aid university students in finding accomodation around the university easily. The project has since rebranded to Qwishi 254 <https://qwishi.streamlit.app/>

**2019: SMARTLAS** — ***HTML,CSS, PYTHON(Django), JS, MYSQL.***

A project I developed to analyze the climatic conditions and soils in different parts of the country and recommend to farmers which crops would do best in a certain area. It emerged Third place during the 2019 Nairobi Tech Week hackathon, and subsequently got incubated at iLab at Strathmore University.

**2020: RONA** — ***HTML,CSS, PYTHON(Django), JS, Firebase Firestores(NOSQL),Python Machine Learning.***

A virtual assistant that helped curb misinformation on Coronavirus, by allowing users to enquire for information and giving them answers from credible sources approved by WHO.It also had an interface that chemists would upload their inventory and users would get recommendations on drugs available at the chemists within their proximity. Leveraging this feature

allowed us to detect outbreaks in an area based on increased demand of a drug in a specific area.

**2022: Prostar Kenya** – ***HTML,CSS, JS(Sencha.js), React Native(for the mobile app), Machine Learning***

A tool that is able to connect to any vehicle GPS Tracker to offer real time location updates on the main interface. It includes a real time notifications feature, and includes features such as geolocking a vehicle to a specific area, generating reports of the vehicle’s trends and routes, and provide recommendations on route optimization to save fuel, based on historical movement patterns.

**2024:EcoYield.AI (In Progress)** – ***HTML,CSS, JS, Python, Machine Learning,Firebase.***

A tool that provides crop recommendations based on soil conditions and climate conditions of an area. It also features a GUI and USSD interface to aid reporting and communication to their SACCOs. It encompasses an IoT device to measure soil nutrient levels.

**ADDITIONAL INFORMATION**

* Technical Skills: Java, PHP, Python (Machine Learning, Automation and Django Framework),Javascript, HTML/CSS, Bash
* Languages: English (fluent), Swahili (fluent), Kikuyu (fluent)
* Certifications:Emobilis Web and Mobile Development Certificate, Cisco Certified Network Associate, IBM Artificial Intelligence Analyst Mastery Award, Cisco Fundamentals of IOT, Cisco Advanced Cybersecurity
* Skills:
  + Programming Languages: C, Assembly(NASM), BashScripting, MySQL, JavaScript, Python (Machine learning and Django Frameworks), PostgreSQL, SQLite , Java
  + Security Skills: Binary Exploitation, Network Forensics, Android exploitation, SQL Injection, CSRF Injection, Reverse Engineering.
  + Other IT Related Skills: Cloud Computing, Project Management, Networking, System Administration, API development, API Integration, API Management, Linux, Docker, Kubernetes.
  + Leadership
  + Teamwork
  + Problem Solving

**AWARDS & RECOGNITION**

* 2024 - First Place in National Research Fund Kenya Hackathon
* 2024 - Finalist in East Africa Intervarsity CTF by CTFROOM Kenya
* 2023 - 3rd Place Winner, Communications Authority of Kenya Cyber Security Hackathon
* 2019 - Certified IBM Artificial Intelligence Analyst (Mastery Award)
* 2019 - 3rd Place in Nairobi Tech Week Sub Saharan Africa Hackathon(Strathmore University)
* RONA Innovation(2020)
  + Featured by The Open Source Initiative for Eastern Africa (OSIEA)
  + Recognized by United Nations Development Program (UNDP) among Top 50 African Innovators in the Africa Innovates Annual Journal <https://www.paperturn-view.com/uk/ai4development/africa-innovates-magazine-ai4dev?pid=MTE114120&v=1.8>
  + Gained nationwide recognition and media coverage<https://www.the-star.co.ke/covid-19/2020-04-05-varsity-student-develops-system-to-fight-coronavirus-myths-misinformation/>
  + Got a full page feature on the Business Daily
  + <https://www.dkut.ac.ke/index.php/dekut-spotlight?view=article&id=464&catid=53>
  + <https://storiesafrica.org/?p=1178>