### KINYUA NICHOLAS MUCHIRI

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GitHub link: https://github.com/MuchiriKinyua

Portfolio link: https://muchirikinyua.github.io/personal-portfolio/

LinkedIn link: https://www.linkedin.com/in/muchiri-kinyua9b702620a/

### PERSONAL DETAILS

Languages: English, Swahili Nationality: Kenyan Gender: Male

### PROFESSIONAL SUMMARY

I am a versatile IT undergraduate currently pursuing a bachelor's degree in communication and computer networks. My skills lie in programming for mobile applications using Flutter, exploring the realms of Artificial Intelligence and harnessing the power of Python for data science and Machine Learning.

In addition to my technical skills, I am a dependable, hardworking, and committed team player who excels under pressure and requires minimal supervision. I have a customer focused approach and thrive in solving complex problems, adapting to new challenges, and troubleshooting midrange systems.

My strengths also include exceptional problem-solving abilities, data analysis proficiency, and the capacity to implement effective solutions, all while adhering to tight timelines and maintaining a professional demeanour. I bring to the workplace a strong sense of teamwork, organizational prowess, efficiency, and attention to detail. I take pride in my work, relish challenges, and possess excellent verbal and written communication skills, enabling me to connect with diverse groups of people.

My skills have been honed through valuable work experiences and active community involvement over the years. I am determined to make a positive impact and succeed in the dynamic IT industry.

### PROFESSIONAL LANGUAGES

• Python SQL HTML

• CSS PHP DART

# KEY SKILLS AND COMPETENCIES ACQUIRED

• Python: SQL:

Data Science Database Management

Machine Learning SQL Queries

Data Analysis Data Retrieval

Data Visualization Data Manipulation

Natural Language Processing (NLP) Relational Databases

• HTML: CSS:

Web Development Cascading Style Sheets

Front-End Development Responsive Web Design

Web Design Styling Web Pages

• DART: PHP:

Flutter App Development Web Development

Mobile App Development Front-End development

UI Design in Dart/Flutter Backend development

**TOOLS** 

Tableau Flutter PowerBI

Laravel Oracle Flask

Figma Supervised ML Unsupervised ML

### **NETWORKING**

- CCNA 1
- CCNA 2
- CCNA3

# **KEY SKILLS AND COMPETIENCIES ACQUIRED**

### CCNA 1

Configure switches and end devices to provide access to local and remote resources.

Configure routers to enable end-to-end connectivity between remote devices.

Configure a network with security best practices

Create IPV4 and IPV6 addressing schemes and verify network connectivity between devices.

# CCNA 2

Configure VLANS and inter-VLAN routing on Layer 3 devices.

Troubleshoot inter-VLAN routing on Layer 3 devices.

Configure redundancy on a switched network using STP and EtherChannel.

Troubleshoot EtherChannel on switched networks.

Configure dynamic address allocation in IPV6 networks.

Configure switch security to mitigate LAN attacks.

# CCNA 3

Configure single-area OSPFv2 in both point-to-point and multiaccess networks.

Implement standard IPV4 ACLs to filter traffic and secure administrative access.

Configure NAT services on the edge router to provide IPV4 address scalability.

Implement protocols to manage the network.

# **TOOLS**

Cisco packet tracer

**ENSP** 

### **WORK EXPERIENCE**

# PROJECTS (Programming and UI designs)

# 1. Natural Language Processing (Machine Learning)

Sentiments on crowd flower brands and product emotions NLP project

It involved analyzing and processing textual data related to brands and product emotions. I applied various NLP algorithms and methodologies to gain insights into customer sentiments and emotions associated with different brands and products. This experience allowed me to enhance my skills in text analysis and sentiment classification, contributing to my proficiency in NLP and data-driven decision-making.

Project link: <a href="https://github.com/MuchiriKinyua/Phase-4-NLP-Project">https://github.com/MuchiriKinyua/Phase-4-NLP-Project</a>

# 2. Understanding Flu Vaccine Hesitancy (Machine Learning)

This project is aimed to provide insights into predicting seasonal flu vaccination status accurately and identifying key factors influencing vaccination decisions. The results from this study could contribute to optimizing pro-vaccination efforts and targeting specific subgroups to maximize the benefits of herd immunity, particularly in the context of seasonal flu.

Project link: <a href="https://github.com/MuchiriKinyua/Flu-Vaccine-Hesitancy-Classification-main">https://github.com/MuchiriKinyua/Flu-Vaccine-Hesitancy-Classification-main</a>

# 3. King County House Sales Project (Statistics)

This project focuses on analysing housing sales data in King County with the aim of understanding how various features, such as the number of bathrooms and bedrooms, impact property prices. It involves a comprehensive examination of these features alongside property prices to determine their proportional relationship. Specifically, the project seeks to answer questions like whether an increase in a particular feature corresponds to a price increase or decrease, or if certain features have any significant impact on property prices.

Project link: <a href="https://github.com/MuchiriKinyua/King-County-House-Sales-Project">https://github.com/MuchiriKinyua/King-County-House-Sales-Project</a>

# 4. Microsoft Movie Project (Data Analysis)

In this Microsoft I sought to find relevant data which will be used by Microsoft in building a movie studio. The project focuses on Box Office Mojo, movie budgets and other movie information that has been used by other movie production companies. Thereafter I made Visualizations to present the data to ensure it is easy to understand to the leader of Microsoft.

Project link: https://github.com/MuchiriKinyua/microsoft-movie-project

# 5. SMALL-SCALE Dairy Farm Information Management (Flutter Application)

SMALL-SCALE Dairy Farm Information Management System refers to a system that automates the activities of small-scale dairy farmers. This is because farmers practicing this type of farming keep their records manually or even don't keep their records at all.

I integrated M-Pesa daraja API from Safaricom with Dart programming language to enable farmers to make milk transactions directly with the application and store them for future transactions. This resulted to an application called Mmaziwa (Mobile-maziwa).

Project link: https://github.com/MuchiriKinyua/Mmaziwa

# ATTACHMENT(Networking)

National Museum of Kenya | January – April 2023

- Helped employees with the use of computers, applications, and the internet usage.
- Responded to employees who encounter error messages while accessing websites, emailing, or downloading content (uTorrent and others).
- Provided excellent care and assist to clients to complete forms and returns for KRA, NTSA, NHIF, and other e-government services.
- Assisted employees with downloads, printing, scanning, attaching, and emailing documents.
- Monitored the use of computers, media equipment, printing equipment, and other machines to ensure compliance with museum policies and applicable laws and regulations.
- I performed troubleshooting of hardware, terminals, software, and connectivity issues.
- Assisted my supervisor with basic record keeping and bookkeeping.
- Operated the various printing machinery in the offices.
- Learned to operate various equipment in the media centres, including photo and video equipment, software, etc.

Attachment report: <a href="https://github.com/MuchiriKinyua/Attachment">https://github.com/MuchiriKinyua/Attachment</a>

### **EDUCATION**

2017 - 2022: Bachelor of Communication and Computer Networks at Technical University of Kenya.

**2003 - 2006:** Kenya Certificate of Secondary Educations (KCSE) at Gaichanjiru High School. Attained Grade of B (plain).

**1995 - 2002:** Kenya Certificate of Primary Educations (KCPE) at Joystar Academy. Attained a 349/500 marks.

### TRAININGS AND WORKSHOP

April 2023 - September 2023: Data Science with Machine Learning at Moringa School

**January 2022:** Python for data science at Jomo Kenyatta University of Agriculture and Technology (JKUAT).

**January 2021 - April** 2021: Cisco Certified Network Associate 1 – 3, JKUAT, school of computing and information technology.

**2018:** Computer Literacy, Aberdare Institute of Management.

2018: Driving Literacy, Petanns Driving School.

# **MEMBERSHIP**

Machine learning and data science group Technical University of Kenya.

Green hearts movement Technical University of Kenya.

### **HOBBIES**

- Web development using HTML and CSS.
- Python Programming for Data Science and Machine Learning.
- Learning networking using Cisco Packet Tracer and eNSP.

# Referees Winnie Anyoso – 0713 163 901 (Data Science Technical Mentor) Luke Okelo – 0723 650 683 (Project Supervisor) Lorna Muriithi – 0726 150 699 (Attachment Supervisor) 7