





# LINKS

Linktr.e: Linktr.ee/bryium

## **SKILLS**

KNOWLDEGE OF FRONTEND COMPONENTS SUCH AS HTML, CSS, JAVASCRIPT AND REACT FRAMEWORK

KNOWLDGE OF MOBILE APPLICATIONS COMPONENTS SUCH AS REACT NATIVE CLI TOOL AND EXPO FRAMEWORK

KNOWLEDGE ON DATABASES SUCH AS MYSQL, NOSQL & MONGODB

KNOWLDEGE OF BACKEND COMPONENTS SUCH AS PYTHON, NODE.JS AND DJANGO FRAMEWORK

KNOWLEDGE OF TESTING WEB APPLICATIONS USING SELENIUM FRAMEWORK

C++

JAVA

PYTHON

TYPESCRIPT

JAVASCRIPT

KOTLIN

NETWORKING

# **Bryium Onyancha**

SOFTWARE DEVELOPER

### **ABOUT ME**

I specialize in frontend and backend development, creating dynamic web applications with HTML, CSS (including Tailwind CSS), and JavaScript using React. In backend development, I excel in Node.js and Python (Django), focusing on robust database management and API development. I'm also adept in mobile development using Java and currently expanding my skills in Kotlin and React Native, particularly with the Expo framework. With a passion for exploring machine learning and data science, I'm eager to learn and grow under experienced mentors, applying insights from my school projects to tackle real-world challenges effectively.

#### **EDUCATION**

DEDAN KIMATHI UNIVERSITY OF TECHNOLGY / Nyeri / 2024 Bachelors of Science in Information Technology Oct 2021 - Dec 2024

- Graduated with Second Class Honors in BSc Information Technology.
- Knowledgeable in software engineering concepts and networking.
- Experienced in using and managing both Linux and Windows operating systems, including system administration tasks.
- Proficient in programming languages like Java, Python, JavaScript, Kotlin, TypeScript, and C++, with a solid understanding of data structures and algorithms.
- Skilled in working with databases such as MySQL, PostgreSQL, and with experience in mobile and web development and also machine learning.

## **WORK EXPERIENCE**

Software Engineer

Dukatech Solutions / Nairobi / Oct 2024 - Jan 2025

- Contributing to developing innovative applications at DukaTech Solutions.
- Involved in the development of Shop Okoa and Mamapesa, a savings and loan platform
- Integrated machine learning models into Mamapesa to predict loan eligibility.
- Developed an AI chatbot to simplify loan applications and educate users on financial concepts.
- Leveraging backend expertise and machine learning skills to design algorithms and models.

IT intern

Ministry of Water, Sanitation and Irrigation / Nairobi

/ Sep 2024 - Dec 2024

- Gained hands-on IT experience by managing networks, websites, and hardware maintenance.
- Installed software, provided technical support, and configured ICT equipment.
- Trained users, facilitated virtual meetings (Zoom, Microsoft Teams), and offered remote support (TeamViewer).
- Managed server systems, conducted data recovery, and maintained ICT inventory.

#### **PROJECTS**

- Developed Kukuafya, a responsive disease diagnosis application that predicts chicken diseases by analyzing images of chicken diseases provided by the user. The app uses a machine learning model, trained with deep learning techniques and TensorFlow, to process the images and deliver an accurate diagnosis.
- We collaborated in developing an app similar to TikTok called ShopOkoa, where I developed the
  analytics feature to analyze optimal engagement times for social media posts. This feature utilized
  machine learning algorithms to process user interaction data and predict the best times to post for
  maximum engagement.
- During my second year in college, we developed an online bakery website that enabled customers to order and purchase bakery products. While the backend was built using PHP, I focused on the front end, where I used React to create a dynamic and responsive user interface. I handled the entire frontend development, while my team worked on the backend.
- I built a weather app using React Native and the Expo framework, which leverages the OpenWeather API to provide real-time weather predictions. The app accurately displays weather information by using the user's current location, granted through location permissions, ensuring precise and up-to-date weather forecasts. While the app is fully functional on localhost, it has yet to be deployed.
- I developed web scripts using Python and Selenium to create test cases for several web applications, automating browser interactions to conduct comprehensive testing and ensure the apps are functioning correctly.
- I collaborated with a team of two to design and develop a mobile e-voting app as a small project. The app allowed users to vote once, ensuring no duplicate votes by restricting voting to a unique email address and phone number per device. It also enabled users to monitor ongoing polls and view the winner, which was determined based on the number of votes received.
- Teleheal is a healthcare website built with Django that connects patients with doctors. I developed features that allow patients to access their personal portal, which contains all their health information and records. The platform also enables online consultations, appointment bookings, and seamless communication between patients and doctors, all while ensuring security and user-friendliness.
- I developed Hura Chatbot, a conversational web application that allows users to interact with a chatbot for responses and weather forecasts. The chatbot assists with general inquiries, while the weather feature provides real-time forecasts based on the user's location.
- I developed nextjs-f1gpt, a cutting-edge Retrieval-Augmented Generation (RAG) chatbot built with LangChain.js and Next.js. This chatbot is uniquely trained on custom data, making it highly relevant and tailored to specific use cases. By integrating LangChain.js for advanced conversational logic and OpenAI for AI-powered responses, nextjs-f1gpt delivers intelligent, context-aware conversations. The seamless integration of Next.js ensures smooth communication between the frontend and backend, providing a fast and interactive user experience. Whether you're looking for precise information or engaging interactions, nextjs-f1gpt brings your data to life with remarkable accuracy and efficiency.
- For access to the source code and additional details about my projects, you can visit my GitHub profile: (https://github.com/Bryium)
- Additionally, you can explore my professional portfolio, which showcases a comprehensive collection of my work and achievements in software development: (https://bryium.github.io/Portfolio/)