

# Kasongo Mavetya Emmanuel

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🌐 <https://kasongomavetyaemmanuel.kasmael.com> 📍 Kinshasa, DRC

## SUMMARY

An experienced Software Engineer with over 4 years of expertise in creating efficient, user-centric Web and mobile applications. I am proficient in Flutter, Dart, Kotlin, Java, Next.js, React, Python, Vue.js, Docker, Caddy, PyTorch and excel in problem-solving, teamwork, and team management. I have developed cross-platform applications throughout my career, led development teams, and integrated advanced features like AI, vector search, embeddings, chunking, ocr, scraping, proxy implementation and push notifications. I am passionate about continuous learning and staying current with industry trends. I hold a Bachelor's degree in Computer Science from Uganda Christian University and am fluent in English, with French as my native language.

## PROFESSIONAL EXPERIENCE

### Full-Stack Web & Flutter Mobile Developer

**YAPP Sailing Course** 📅 03/2025 Present 📍 Full-Time, Remote USA

- Implemented an interactive sailing game using the Flame game engine, enhancing user engagement through gamified learning.
- Resolved video playback glitches occurring when playback speed was increased, improving media stability and UX.
- Manage Enhanced in-app AI chat features (ChatGPT integration) to ensure structured, context-aware responses for users.
- Redesigned and improved the Settings UI, aligning with modern design standards and improving usability.
- Enhanced form validation with dynamic feedback messages and smooth animations for a more responsive experience.
- Revamped the testimonial carousel for better presentation and smoother navigation.
- Extended course offerings by implementing Skipper and VHF course modules alongside existing Crew content with a web app built in Vue.js and C#/.NET course builder.
- Successfully contributed to an app now live on both App Store and Google Play, improving overall user satisfaction and retention and deployed the course builder web app to hostinger VPS.

### Web & Flutter Mobile Developer

**50naire HIGH SCHOOL** 📅 05/2024 12/2024 📍 Full-Time, Hybrid

- Built a cross-platform mobile application that empower parents to follow their children movements with real-time notifications and automated check of cleared and uncleared students using Flutter, REST APIs, RFID Scanner.
- Developed the web admin portal for managing students, drivers, payments and buses using Next.js, React hooks, and shadcn/ui components.
- Integrate push notifications using Firebase Cloud Messaging to improve user experience and retention, leading to higher user ratings.
- Manage regular app updates and distributions on Google Play and the Apple App
- Store to ensure users have access to the latest versions.

### Full-Stack Web & Flutter Mobile Developer

**SCIENTIFIC RESEARCH AND EXPERTISE CENTER** 📅 07/2023 02/2024 📍 Part-Time, Hybrid

- Built the landing page of Ikiota-Hub web-app, an automated solution for startup to get loans using Flutter, REST APIs, and Bloc state management.
- Updated responsiveness of the forms and steppers using Media queries.
- Attended as the judge to the training finalists exam projects presentations.
- Led intern teams as a team leader.

### Flutter Mobile Developer

**TECHY AHEAD** 📅 06/2022 12/2022 📍 Part-Time, Hybrid

- Built a cross-platform mobile application that provided a convenient and secure way for children to receive school fees support from guardians.
- Built and maintained two advanced Android mobile apps that enhanced user experience and facilitated the students profiles access, money transfer, real-time chats admin-guardian using Flutter, Bloc, and Firebase.
- Led the mobile development team, ensuring consistency in clean code for future projects.
- Oversaw the entire development life cycle and maintained apps in production.

### Flutter Mobile & Web Developer

**SCIENTIFIC RESEARCH AND EXPERTISE CENTER TRAINING** 📅 11/2021 04/2022 📍 Full-Time, Remote

- Built a chat mobile application utilizing artificial intelligence, developed with Flutter, Redux, and REST APIs.
- Developed an ecommerce and delivery mobile application that enabled users to order goods from their restaurants of choice and receive it on step door delivery.
- Integrated Google Maps Api and third-party Payment system using Provider state management.

## EDUCATION

### Bachelor's of Science in Computer Science

**Uganda Christian University-Mukono**

📅 2017 2021 📍 Mukono, Uganda

## CERTIFICATIONS

**Multitasking Course: Boost Your Productivity and Efficiency**

**Flutter and Dart - The Complete Guide**

## SKILLS

### Languages

Dart JavaScript Java Kotlin C#

Python TypeScript SQL

### Frameworks & Libraries:

Flutter Next.js React Vue.js .Net

PyTorch NLTK Sentence Transformers

Tesseract OCR

### DevOps & Tools

Slack Trello Google Play Console

Android Studio Google Cloud Platform GCP

Docker Caddy Git GitLab GitHub

App Store Connect VS Code RevenueCat

## LANGUAGES

English Fluent ●●●●●

French Native ●●●●●

## KEY ACHIEVEMENTS

### Boosted User Engagement at Yapp Sailing Course

Boosted user engagement by introducing a gamified learning module (Flame-based sailing game). Improved AI response reliability by 40%, increasing user interaction time within the app. Delivered cross-platform release with new course modules, contributing to a broader audience reach and higher app store ratings.

### Enhanced User Engagement and App Performance at 50naire Bus System

At 50naire Bus System, I reorganized the workflow by addressing and fixing user-reported issues, which led to increased user satisfaction and engagement. I improved app performance by implementing lazy loading, significantly boosting response times in production. Additionally, I introduced project management tools like Trello, streamlining project organization and tracking. These efforts, along with payment tracking features, resulted in a notable increase in speed execution of students movements in and out the bus to/from school.

## PROJECTS

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### YAPP SAILING COURSE

📅 03/2025 - Now

Yapp is an app that let 's you Learn to Sail, Engage with AI Chat, Access Nautical Glossary, Knot-Tying Handbook, and More! Perfect for beginners, the app offers step-by-step lessons to build a strong sailing foundation.

- [App store link](#)
- [Playstore link](#)

### Notebook Transcriber AI

📅 05/2025 - 02/2026

Notebook Transcriber AI helps you extract, understand, and chat with information from audio, video, PDFs, websites, and YouTube links all in one place. Turning any content Into actionable Knowledge. Engineered a Python backend utilizing PyTorch, NLTK, and local BGE sentence embedding models to handle OCR, semantic chunking, and vector search. Deployed behind a Caddy reverse proxy on a virtual private server, and launched native clients on both major app stores with Google AdMob monetization.

- [Web Portal link](#)
- [App store link](#)
- [Playstore link](#)

### DailyHabit - Routine tracker

📅 03/2026 - 05/2026

An offline-first productivity Habit tracker. Developed a robust, conflict-free local database synchronization architecture (Hive and Shared Preferences) to merge offline user states with cloud storage securely. Configured background OS workers to run recurring local push notification reminders.

- [Web Portal link](#)
- [App store link](#)
- [Playstore link](#)

### 50naire Bus System

📅 05/2024 - 12/2024

50naire Bus system is an application designed for the digital management of 50naire high school bus and students. It facilitates efficient electronic students buses payments check through the scanning of a student's RFID card and also send real-time notifications to parents when their child(ren) enter or leave the bus.

### IKIOTA-DATA

📅 07/2023 - 02/2024

IKIOTA-DATA is a web application that manages startups and banks by electronically allowing startup to apply to banks loans offers.

### XCOOKER

📅 07/2022 - 05/2023

XCooker is an IoT-based mobile application that controls an induction cooker. Users can adjust the temperature, set a timer for automatic cooking time limits, and select different cooking modes.

### JULISHAP

📅 02/2022 - 10/2022

Julihap is a mobile application that facilitates interaction between the public and the police. It enhances public safety by allowing users to send instant alerts to the police in case of danger or security concerns.

## KEY ACHIEVEMENTS

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### Improved Productivity and Communication at TECHY AHEAD

At TECHY AHEAD, I helped the company prioritize socially impactful projects, leading to successful outcomes. I identified the need for a development team due to tight deadlines and increased productivity by advocating for and assisting in team expansion. To enhance communication, I introduced Slack as a tool, which greatly improved interaction between developers and administration. These efforts, combined with successful app launches, contributed to a significant growth in the customer base, expanding from 100 to 900 in less than 2 months.

### Contributed to Revenue Growth and Efficiency

I helped develop highly successful software solutions, including the city's best-selling software, which significantly improved the company's market position and boosted sales.

### Streamlined Development Processes at SCIENTIFIC RESEARCH AND EXPERTISE CENTER

At SCIENTIFIC RESEARCH AND EXPERTISE CENTER, I revamped the internship program and coached interns who eventually became key developers within the company. I proposed utilizing BaaS solutions like Firebase for prototypes, which reduced delivery time and minimized delays. I also recommended expanding our focus from Android-only to include iOS, which enhanced our reach and audience engagement. Additionally, I developed an internal management system that improved employee management and operational efficiency.

## INDUSTRY EXPERTISE

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### End-to-End Technology Stack



### Mobile App Development



### AI Integration



### Backend Technologies

