

Ridwan Farhan

Software Engineer

📞 (+254) 716 664 576 | 📩 riabdullahi@usu.ac.ke | 💬 ridhwan497

Education

United States International University Africa (USIU)	Nairobi, Kenya
BSc Software Engineering	09/2022 - 01/2026
Aga Khan High School Nairobi	Nairobi, Kenya
Kenya Certificate of High School Education (KCSE)	09/2016 - 07/2020

Experience

Research Assistant	Maseno University	07/2024 - 07/2025
○ Contributed to a Gates Foundation-funded initiative to develop a high-quality corpus of text and voice data for several African languages spoken in Kenya, supporting linguistic research and AI development.		
○ Designed and curated prompts to ensure diverse and contextually relevant data collection for speech and text analysis.		
○ Reviewed and validated large datasets of transcribed speech and written text to enhance accuracy, consistency, and linguistic integrity. Assisted in generating voice and text data, helping to build a robust multilingual dataset for future natural language processing (NLP) applications.		
Software Engineer Intern	Nova Care Center	04/2025 - Present
○ Supported the maintenance and daily operations of a health management system used to track developmental progress for autistic children.		
○ Restored and updated years of missing client data through the system interface, ensuring data accuracy, completeness, and consistency across modules.		
○ Added and configured client goals and milestones within the system to support progress monitoring by therapists.		

Software Engineering Projects

Platform Agnostic File Sharing System Application (PAFSS)

- Developed a peer-to-peer file sharing system using Flutter with full cross-platform support.
- Implemented WebRTC-based communication for direct, real-time file transfers without external servers.
- Ensured secure, fast, and scalable sharing through efficient signaling, connection handling, and transfer protocols.

Online Examination System

- Developed a Java-based Online Examination System with a JavaFX client and Spring Boot backend.
- Implemented secure login, timed exams, and auto-submission features to prevent cheating.
- Integrated H2 for testing and MySQL for production, ensuring smooth database switching via Spring profiles.

RTFM Helper

- Designed and built a tool to streamline access to technical documentation, reducing lookup time for developers.
 - Implemented efficient text processing and retrieval using **Python**, **NLTK**, **BeautifulSoup**,
 - Improved workflow for developers by automating manual documentation searches.

Multi Tenant Property Management System

- Developed a database-per-tenant backend with dynamic PostgreSQL database creation.
- Implemented JWT authentication with tenant-aware routing and role-based access control.
- Built core modules: Tickets, Payments, Announcements, User Management.
- Implemented master/tenant JPA configs, dynamic datasource loading, validation, and global error handling.

Awards and Honors

Deans List, School of Science and Technology
Finalist L'Oréal BrandStorm Competition (Kenya)

2022-2023
2025

Skills

Programming Languages: C/C++, Dart, Java, Python, Golang

Tools and Frameworks: Bash, zsh, Linux, Git/GitHub, JavaFX, SpringBoot, Gradle, VIM (nvim), Flutter, Figma, Jenkins, PostMan, JWT, WebRTC, Postgres, MySQL

Languages: English (Excellent), Swahili(Proficient), Arabic(Basic)