

PERSONAL SUMMARY

Ramsey is a self-driven and budding academic researcher who has been actively involved in developing high-impact digital initiatives using the DHIS2 platform. He has significantly contributed to developing and operationalizing iCHIS, a digitalized nationwide community health services solution, and NAMIS, the national agricultural management information system. In addition to his passion for digital transformation initiatives, Ramsey’s research interests lie at the intersection of digital security, AI, and edge computing. Currently, he serves as a staff associate in the Department of Computing at the University of Malawi – where he has been actively involved in teaching, outreach activities, and software development. He firmly believes in community-driven digital transformation, as evidenced by his engagement with Zindi in his role as country ambassador, where he seeks to democratize the knowledge of AI. In addition, Ramsey is an avid enthusiast of emerging technologies such as blockchain, IoT, quantum computing, and GenAI, just to name a few.

PROFESSIONAL EXPERIENCE

UNIVERSITY OF MALAWI (Department of Computing)
Staff Associate/Assistant Lecturer
Part-Time Instructor

Zomba, Malawi
June/2023 – Present
August/2022 – May/2023

- Teach and prepare assessments for undergraduate modules in Computer Networking and other modules as assigned
 - Assisted in teaching modules such as machine learning, cryptography, and network programming
- Supervise undergraduate student projects

UNIVERSITY OF MALAWI (Department of Computing)
Software Developer/Implementer (HISP UNIMA)

Zomba, Malawi
May/2022 – Present

- Support the development and implementation of a nationwide Communication Health Information System aimed at integrated digitally-supported service delivery by community health workers
- Led the digitalization of a nationwide ITN mass campaign – a Malaria prevention initiative

PARTNERS IN HEALTH / ABWENZI PA ZA UMOYO
Medical Informatics Intern

Neno, Malawi
August/2020 – October/2020

- Worked closely with the M&E team in ensuring timely, complete, and high-quality COVID reporting, which included fieldwork
- Wrote and designed scripts for automated data retrieval from OpenMRS and DHIS2 that significantly sped up custom report generation.

EDUCATION

UNIVERSITY OF MALAWI
Computer Network Engineering (BSc.)

Zomba, Malawi
July/2017 – April/2022

- Awards**
 - Deans’ List x 2

Projects
 - **Smart Home Automation System**

April 2022

This IoT-based smart home automation system provides a platform for intelligent and efficient consumption of domestic utilities. This was submitted in partial fulfillment for the award of a Bachelor of Science degree and was conducted as a 2-man team effort. My involvement included developing a Flutter mobile app-based user interface and integrating the Firebase backend with the Arduino microcontroller hosting different sensors.

Link : <https://github.com/rnjema/smart-home-automation-project>

SKILLS

- Mobile & Web Programming - Flutter, JavaScript, ReactJS, PHP Laravel
 - Databases – SQL, NoSQL
 - Data Science & Machine Learning – Python, Pytorch
- Network Systems Administration - UNIX
 - Fundamental Network Programming & Applications Development – Python, C

INTERESTS & EXTRA-CURRICULAR ACTIVITIES

DHIS2 Tracker Configuration Academy Expert Facilitator/Trainer	Malawi 11 th – 15 th November 2024
Zindi Africa Community Ambassador Country Ambassador	Malawi September 2022 – November 2024 December 2024 - Present
African Drone and Data Academy Remote Pilot License Training	Malawi University of Science & Technology January – February 2024
AMLD Africa Ambassador	Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland September – December 2022
Data Science Africa Participant	Institute of Accountancy Arusha, Tanzania 18 th – 22 nd July 2022
Zindi UmojaHack Africa (Africa's top Inter-University ML Hackathon) University Organizer & Participant	University of Malawi March 2022
Malawi Data Science Bootcamp Participant	Mzuzu University October/2021 – November 2021
Python Coding Club Founding Member	University of Malawi January 2022 – Present
Electronics Student Society Member	University of Malawi 2019 – April 2022
Computer Science Student Society Member	University of Malawi August 2017 – April 2022
Old Mutual Mathematics Olympiad 3 rd Place Candidate (overall)	Mzuzu University January 2015
Student Debate Club President	Pius XII Minor Seminary June 2014 – June 2015