

SHAWAL MBALIRE

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shawalmbalire.com

Python C++ C C-sharp JavaScript HTML CSS SQL MATLAB Arduino AHDL Git Bash LaTeX Linux EAGLECAD ALTium

Education

Makerere University, Kampala *Feb 2022 - Jan 2026*
Bachelor of Science, Electrical Engineering. CGPA: 3.99

CodeIT Institute of Technology *Aug 2022 - Jan 2022*
Certificate in python, aws, blockchain

Run Automations and Robotics *Sep 2022 - Oct 2022*
Certificate in IOT and Embedded systems

Projects

Unity Cyber Security Game

A third person shooter based on unity engine and C-sharp to teach CyberSecurity to teenagers

Python Text to speech

A gui python project to call apis or libraries like gtts to speak out text

Python Location Finder

A python project to find location by checking the Ip address of a given device connected to the internet

Patient Database

A web application invoking an online nosql Database Dynamo Db to store patient data on cloud

IOT Attendance Monitoring

A low cost RFID attendance system for employees at a small enterprise in Uganda

Qr code students Attendance

An automated data entry system for student in universities to only print a qr code for attendance monitoring.

Student Calendar

A calendar with flutter emapsizing upcoming tests that can be updated by a class representative then shared to everyone else in the class.

shawalmbalire.com

Developed a personal portfolio hosted on firebase with a custom domain from google domains.

Hackathons

UNESCO India-Africa Hackathon

- Selected as one of 19 students to represent Uganda in India to develop solutions for Africa

8th CAMTECH Med-Tech Hackathon

- Ideated to develop solutions for faster data entry to reduce the tool on nurses in Uganda

Decentralised Umoja 3 Bount Hack

- Developed a solution for the price is right problem .
- Created a how to guide on creating the project for other learners to gain assistance.

Coding Contests

IEEE Extreme

- Solved algorithm questions in a time frame of 24 hours
- Ranked in top 20 percent of the 6000 teams globally and third in Uganda

Google Kickstart

- Earned python badges after solving algorithm problems a skill learnt by participation in coding competetionswith google.

IEEE puzzlers

- First to attain the level 8 emerald badge in Uganda and 18th puzzler in IEEE globally.

LeaderShip

Chair IEEE Makerere University Student Branch
Sep 2022 - Sep 2023

- Increased membership sixfold through publicising IEEE events on social media.
- Doubled the number of student chapters by forming relations with lecturers.

Vice-Chair Makerere University RedCross Chapter
Sep 2022 - Sep 2023

- assistance to the chair in attending meetings and organising evnts such as blood donations, community services among others.

Coordinator Makerere University RedCross Chapter
Feb 2022 - Sep 2022

- Increased the blood donations count by 50 percent relative to other colleges in University by reaching out to the respective class leaders and puhing for donation.

Work

Shop Assistant Zenith Auto Spare Parts

Aug 2018 - Feb 2022

- Increased customers by 5 after registering business by registering the business on google maps
- Improved book keeping by printing data entry books

Other

GDSC Makerere University

- Presented flutter mock application for students to manage their timetable after attending a 3 week flutter training session.
- Increased membership from college of engineering by publicising GDSC events on social media

Math olympiad

- Selected as one of 6 students to represent Uganda in both International math olympiad(2020 and 2021) and Pan African Math olympiad (2021)
- Awarded bronze medal for outstanding perfomance in Pan African Math olympiad 2021

Chess

- Participated in the 2020 Premierbet National Chess League.

Github

- Ranked 228 among most active github users in Uganda

Open Source

- Part of Apache APISIX Global community and meetings

Communities

- Engineers for change
- GDSC Makerere University
- GDG Kampala
- Python Kampala
- IEEE
- Engineers without boundaries
- Uganda Institute of professional Engineers
- IBM Z Global Student Hub