Name of Expert: Mr. Dennis Makwakwa

**Date of birth** 24th December 1997

**Profession:** Full Stack Developer

**Education:** • Bachelor of (B.Sc.) Business Information Technology, Malawi

University of Science and Technology (MUST) – Malawi

Employment Record				
Date	Employer and Position	Countries of Experience	Key-Tasks Handled	
August 2022-current	Nthanda Foundation. Full Stack Developer and Trainer. Reference: Panji Harwa +265 994376605	Malawi	<ul> <li>Software development (mobile and web)</li> <li>API testing and implementation</li> <li>Software and hardware systems support</li> <li>web design and development</li> <li>User Requirement Identification</li> <li>User acceptance test formulation and systems Evaluation</li> <li>System design</li> <li>Database design and administration</li> <li>Training users on hardware and software operations</li> <li>Teaching technologies to different audiences</li> <li>creating Content to teach</li> </ul>	
November 2021	Lilongwe University of Agriculture & Natural Resources-LUANAR.  Senior Software Engineer.  Reference: Frank Phukaphuka. fphukaphuka@luanar.ac.mw	Malawi	<ul> <li>Software development (mobile and web)</li> <li>API testing and implementation</li> <li>Software and hardware systems support</li> <li>web design and development</li> <li>User Requirement Identification</li> <li>User acceptance test formulation and systems Evaluation</li> <li>System design</li> <li>Database design and administration</li> </ul>	

- Training users on hardware and software operations
- Juggle multiple projects and priorities simultaneously in a fast-paced environment
- Liaise with management and clients to identify and define project requirements, scopes, and objectives. That align with organizational goals
- Coordinate internal and external resources, ensuring projects remain within scope, schedule, and defined budgets
- Install, configure, and maintain computer hardware.
- Software development (mobile and web)
- API testing and implementation
- Software and hardware systems support
- web design and development
- User Requirement Identification

•

- Recover data.
- Closely always monitor the performance of the servers.
- Implement operating systems.
- Technical support and guidance.
- Routine system maintenance.
- System backup and security.
- Analyse project progress and, when necessary, adapt scope, timelines, and costs to achieve maximum benefit
- Assign roles and tasks to dedicated team members, based on individual strengths and abilities
- Build the skill sets of individual team members and capture overall learnings for the company
- Achieve organizational goals while upholding standards and best practices

November 2021-	Agile systems.	Malawi	Software development
January 2022	Full Stack Developer. Reference: Alinafe Mbendera, +265996249915	Ivialawi	<ul> <li>(mobile and web)</li> <li>API testing and implementation</li> <li>Software and hardware systems support</li> <li>web design and development</li> <li>User Requirement Identification</li> <li>User acceptance test formulation and systems Evaluation</li> <li>System design</li> <li>Database design and administration</li> <li>Training users on hardware and software operations</li> </ul>
2017-April 2020	Malawi University of Science and Technology. ICT Officer (Intern). Reference: Rodney Maganga rmaganga@must.ac.mw	Malawi	<ul> <li>Assist with help desk calls, scheduling, and tickets management</li> <li>Follow up on user requests and ensure timely resolution</li> <li>Basic end-user support on technical issues covering Mac/PC hardware, Printers, scanners, computer peripherals, Mobile devices (iOS, Android) and network connectivity</li> <li>Under IT staff guidance, create accounts and configure end-user computer systems</li> <li>Assist in the maintenance of IT standards and documentation</li> <li>Under the guidance of IT staff, inventory technology equipment and software.</li> <li>Use remote tools for maintenance and support of ICT systems</li> <li>Maintain audio and video equipment in conference rooms</li> <li>Support / maintenance of IP telephony system</li> <li>Other duties as may be assigned for exposure to modern ICT systems</li> </ul>

Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks

### **KEY QUALIFICATIONS:**

Mr. Dennis Makwakwa is a Full-stack developer. He is honest, highly motivated, result-oriented and has manifested himself in this regard by successfully working on several projects. He has a high level of competence in software development, networking, Server administration and database administration in addition to the strongholds mentioned above he also has vast knowledge in accounting and business administration. He has worked as a Full-stack developer for Malawi University of Science and Technology from 2017 to 2020 (internship) under various projects for instance MUST's Human Resource Management system and MUST's Students Electronic Voting system. Furthermore, in 2021, he has worked at Agile systems as a Full stack developer where he developed Various systems used across Malawi including the MAGU administration system and student portal, and tourism systems Mr Makwakwa worked at LUANAR (Lilongwe University of Agriculture and Natural Resources) as senior software engineer for ICED ALL-IN project (Adoption of digital tools in agriculture). In addition to this, he has been part of several innovations, networking, and software development projects. His research interests are Software Development, green innovations, machine learning, and the Internet of Things. Dennis 'passion is to be part of developing technologies in the industry of ICT that can lead to the growth of technological development in developing countries like Malawi.

#### **RELEVANT PROJECTS:**

Name of Project: JOB TANK Year: 2023 - In progress Location: USA and Malawi

**Client: Michigan University and LUANAR** 

**Project Description:** LUANAR in collaboration with Michigan University is implementing a project that will allow students to expand their job opportunities by exposing them to E-work. Using the application being developed students will be taught how to bundle them selves professionally, the application will also have recommended vacances for a specific user.

Position Held: Full-stack Developer.

# **Activities Performed:**

- Integrating the application with UPWORK external APIs
- Implementing a statistical layer to keep track of all activities on the app.
- Developing front end system architecture (HTML 5, java-script, CSS).
- Designing user interactions on the system.
- Developing back-end (GO and Laravel).
- Creating servers and databases for functionality (Plesk server manager, SQL databases).
- Ensuring cross-platform optimization for mobile phones.
- Ensuring responsiveness of applications.
- designing the Interface.
- Seeing through a project from conception to finished product.
- Designing and developing APIs.
- Meeting both technical and users needs.

Name of Project: Digisavvy Africa.

Year: 2021 - 2023 Location: Malawi Client: Ntha Foundation.

**Project Description:** Digisavvy is an e-learning platform that offers various skills courses for success, which are delivered by highly qualified and experienced trainers and consultants. Courses can be accessed from anywhere, online. it has

courses ranging from Advocacy Skills, Creativity Skills, Entrepreneurial Skills, Professional Skills, all the way to Event Planning skills.

Link: digisavvy.org

Position Held: Full-stack Developer and trainer.

**Activities Performed:** Responsible for the system(digisavvy) Development, maintenance, Installation and configurations of software and hardware, management of network servers and technology tools, Setting up accounts and workstations Monitor performance and maintain systems according to requirements, Troubleshoot issues and outages,

Ensure security through access controls, backups, and firewalls, Upgrade systems with new releases and models, Train staff on new technologies. Creating content to deliver on the platform, delivering the content (physically or online).

Name of Project: Colance Africa.

Year: 2021 - 2023 Location: Malawi Client: Ntha Foundation.

**Project Description:** colance.africa is an online platform that offers freelancers opportunity to market their skills and it also allows employers to find freelancing services they need.

Link: colance.africa

Position Held: Full-stack Developer and trainer.

**Activities Performed:** Responsible for the system(colance.africa) Development, maintenance, Installation and configurations of software and hardware, management of network servers and technology tools, Setting up accounts and workstations, Updating WordPress plugins

Name of Project: Eagle Security Mobile Application.

Year: 2022 Location: Malawi

Client: Eagle security services.

**Project Description:** This is a mobile application that tracks guards activities (Movements, check in and out), clients activities (Movements) and it also has a panic button/future where a clients can call for backup whenever and where

ever they are.

Position Held: Full-stack Developer.

### **Activities Performed:**

- Developing front end system architecture (Flutter).
- Designing user interactions on the system.
- Developing back-end (Django Python).
- Creating servers and databases for functionality (MYSQL and MySQL lite).
- Ensuring cross-platform optimization for mobile phones.
- Ensuring responsiveness of applications.
- designing the Interface.
- Seeing through a project from conception to finished product.
- Designing and developing APIs.
- Meeting both technical and consumer needs.
- Staying abreast of developments in applications and programming languages.
- Server administration
- User trainings
- Technical support

Name of Project: ALL-IN PROJECT

Year: 2021-ongoing

Location: Malawi

Client: The Lilongwe University of Agriculture and Natural Resources (LUANAR)

**Project Description:** The Lilongwe University of Agriculture and Natural Resources (LUANAR) with support from USAID Feed the Future, through ALL-IN and UC-Davis is implementing a project on the adoption of digital technologies and platforms to improve the marketing efficiency of horticultural produce in Malawi. The project is being implemented in Dedza and Mzimba south. Zakudimba is a mobile application that includes Ecommerce, advisory, farms inputs suppliers, trusted buyers for a farmer and buyers to have access to.

Link: Zakudimba.mw

Position Held: Senior Software Engineer.

### **Activities Performed:**

- Software development (mobile and web)
- API testing and implementation
- Software and hardware systems support
- web design and development
- User Requirement Identification
- User acceptance test formulation and systems Evaluation
- System design
- Database design and administration
- Training users on hardware and software operations
- Juggle multiple projects and priorities simultaneously in a fast-paced environment
- Liaise with management and clients to identify and define project requirements, scopes, and objectives. That align with project's goals
- Coordinate internal and external resources, ensuring projects remain within scope, schedule, and defined budgets
- Install, configure, and maintain computer hardware.
- Software development (mobile and web)
- API testing and implementation
- Software and hardware systems support
- web design and development
- User Requirement Identification
- Recover data.
- Closely always monitor the performance of the servers.
- Technical support and guidance.
- Routine system maintenance.
- System backup and security.
- Analyse project progress and, when necessary, adapt scope, timelines, and costs to achieve maximum benefit
- Assign roles and tasks to dedicated team members, based on individual strengths and abilities
- Build the skill sets of individual team members and capture overall learnings for the project
- Achieve project's goals while upholding standards and best practices

Name of Project: Matandani Seventh-day Schools Management System.

Year: 2022 Location: Malawi

Client: Matandani Seventh-day Schools.

**Project Description:** This system allows the school to manage registration, admissions, academic calendar, attendance, and more. this school management system centralises tedious school processes and significantly increases effectiveness and efficiency of school administration.

Position Held: Full-stack Developer.

### **Activities Performed:**

- Developing front end system architecture.
- Designing user interactions on the system.
- Developing back-end.
- Creating servers and databases for functionality.

- Ensuring cross-platform optimization for mobile phones.
- Ensuring responsiveness of applications.
- designing the Interface.
- Seeing through a project from conception to finished product.
- Designing and developing APIs.
- Meeting both technical and consumer needs.
- Staying abreast of developments in applications and programming languages.

Name of Project: Pa.mw System

Year: 2021 Location: Malawi Client: Agile Systems.

Project Description: This is a website which encompasses many services found in Malawi. Its main purpose is to simplify

the access to digital services available in Malawi

Link: Pa.mw System

Position Held: Full-stack Developer.

#### **Activities Performed:**

- Developing front end system architecture.
- Designing user interactions on the system.
- Developing back-end.
- Creating servers and databases for functionality.
- Ensuring cross-platform optimization for mobile phones.
- Ensuring responsiveness of applications.
- designing the Interface.
- Seeing through a project from conception to finished product.
- Designing and developing APIs.
- User trainings

Name of Project: Malawi Assemblies of God University Student portal (web and mobile).

Year: 2021 Location: Malawi

Client: Malawi Assemblies of God University (MAGU).

**Project Description:** This system allows the MAGU to manage registration, admissions, academic calendar, attendance, accounts and more it also allows students to access their grades, book accommodation, vote for their student representatives, all online. And can be accessed through the <u>website</u>.

### Position Held: Full-stack Developer.

# **Activities Performed:**

- Developing front end system architecture.
- Designing user interactions on the system.
- Developing back-end.
- Creating servers and databases for functionality.
- Ensuring cross-platform optimization for mobile phones.
- Ensuring responsiveness of applications.
- designing the Interface.
- Seeing through a project from conception to finished product.
- Designing and developing APIs.
- Meeting both technical and user's needs.
- integrating the portal with sage accounting system
- User trainings

Name of Project: Malawi University of Science and Technology Human Resource Management system

Year: 2020 Location: Malawi

Client: Malawi University of Science and Technology (MUST)

**Project Description:** This is a suite of software applications used to manage human resources and related processes throughout the employee lifecycle. It enables MUST to fully understand its workforce while staying compliant with changing tax laws and labour regulations. HR leaders and staff are the primary users, given that they run day-to-day workforce operations and are responsible for compliance and performance reporting. However, HR isn't the only department that benefits. ALL employees with self-service for common tasks—an important selling point for younger hires and they can also apply leaves send other requests Executives also uses this system to generate data on workforce trends and their business implications.

### Position Held: Full-stack Developer.

### **Activities Performed:**

- Developing front end system architecture.
- Designing user interactions on the system.
- Developing back-end.
- Creating servers and databases for functionality.
- Ensuring cross-platform optimization for mobile phones.
- Ensuring responsiveness of applications.
- designing the Interface.
- Seeing through a project from conception to finished product.
- Designing and developing APIs (Laravel).
- Meeting both technical and user's needs.

### Name of Project: Malawi University of Science and Technology Online Student Voting system

Year: 2020 Location: Malawi

**Client: Malawi University of Science and Technology (MUST)** 

**Project Description:** This system enables students to vote for their student council representatives online using computers. This system displays live poll results, and it also ensures security as no student can vote twice without the system flagging them and it also has graphs for statistical analytics of the results.

### Position Held: Full-stack Developer.

### **Activities Performed:**

- Developing front end system architecture.
- Designing user interactions on the system.
- Developing back-end (laravel).
- Creating servers and databases for functionality (MySQL).
- Ensuring cross-platform optimization for mobile phones (CSS and tailwind ).
- Ensuring responsiveness of applications.
- designing the Interface (HTML).
- Seeing through a project from conception to finished product.
- Designing and developing APIs (Laravel).
- Meeting both technical and user's needs.

### Other websites and systems.

- Home Ntha Foundation
- Home Kwathu Innovation & Creative Centre (kwathucentre.org)
- <a href="https://malawian.info/">https://malawian.info/</a>
- https://drdee23.github.io/
- https://wltradingltd.com/
- http://bants2business.com/
- http://bienafrica.com/
- <a href="http://music4malawi.com/">http://music4malawi.com/</a>

Expert's contact information: dennismaqua@gmail.com +265 995908058.

Portfolio: https://drdee23.github.io/

**Certification:** I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available, as and when necessary, to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client.



15/02/2023

(Name of Expert: Mr Dennis Makwakwa)

Signature

Day/Month/Year