

# GIFT BONGANI MAHLAMBI

## RESUME

■ Cape Town, WC 7580 ■ +27619688502 ■ giftmahlambileroy@gmail.com ■

### PROFESSIONAL SUMMARY

Computer Engineering graduate with a Bachelor of Engineering Technology, focused on networking, cloud infrastructure, system design and IT support. Practical experience in IP addressing and subnetting, TCP/IP, router and switch configuration, fibre installation and splicing, and end-to-end network deployment. Developed an SDN-based multi-router configuration GUI and a SQL-driven database management system. Skilled in Python, C, Java, SQL, JavaScript, and Linux. Actively pursuing entry-level roles in Network Engineering, Cloud Engineering, IT Support, or Software Development where strong technical fundamentals, problem-solving ability, and rapid learning can add value.

### SKILLS

#### TECHNICAL SKILLS

- TCP/IP, DNS, DHCP
- Network Monitoring & Troubleshooting
- SQL Databases

#### IP Addressing & Subnetting

- Router & Switch Configuration (Basic)
- Linux, Windows and IOS Systems
- SDN & Multi-Router Configuration

#### PROGRAMMING

- C
- SQL
- CSS

#### Python

- Java
- JavaScript
- HTML

#### SOFT SKILLS

- Communication

#### Team Collaboration

- Leadership & Mentoring

### EXPERIENCE

#### VOLUNTEER 05/2022 to Current

#### ENCOUNTER CHURCH CAPE TOWN, Cape Town

- Provided technical support for live media systems, audio equipment, and event operations
- Assisted with setup, troubleshooting, and maintenance of technical equipment.
- Mentored and trained new volunteers on media and systems
- Collaborated with a team to ensure reliable system operation during live events

#### TUTOR 02/2021 to 08/2021

#### Emshukantambo Secondary School, Pimville, South Africa

- Provided homework assistance using specific curriculum and materials.
- Supported students with helpful study habits and exam strategies.
- Enhanced students' understanding of subject matter by incorporating real-world examples into lessons.
- Improved literacy rates among students through innovative reading and comprehension strategies.
- Motivated students towards learning and studying to build self-confidence and reduce fear of failure.

## EDUCATION

Bachelor of Computer Engineer : Engineering Technology, Expected in 04/2026

Cape Peninsula University of Technology - Cape Town, Western Cape

### KEY PROJECTS

#### **SDN Multi-Router Configuration GUI:**

- The objective was to design a centralized SDN that automates multi-router configuration and enables migration from static routing to controller-driven automated routing.
- Technologies Used: Linux(VirtualBox),GNS3, GUI development, virtual networking environment,RESTCONF API.
- Skills Developed: Python advanced code writing,SDN architecture, routing automation, IP configuration, network virtualization, centralized network management,Network troubleshoot.

#### **Database Management System (Group based project)**

- Objective: Design and implement a relational database system for efficient data storage, retrieval and reporting based on real-world business requirements.
- Technologies Used: MySQL programming language, ERD modeling.
- Skills Developed: Database design and management, ERD modeling, flow plan creation, Advanced SQL querying, data analysis, query optimisation, team collaboration and technical documentation

#### **Electronic Ballot Machine & Vote Counter:**

- Objective : Develop a secure and user-friendly electronic voting system that automates vote collection and counting while preventing duplicate voting and safely storing voting data.
- Technologies Used: Java
- Skills Developed: Java application development, GUI designing, Data integrity and handling, secure system design, automation logic and control flow.

#### **Solar Powered washing machine**

- Objective: Design a smart washing machine capable of completing all wash cycles reliably under fluctuating solar power conditions through intelligent energy management.
- Technologies used: Arduino,tinkercad,motors,sensors,LEDs,Infra-Red sensors.
- Skills Developed: Embedded systems development, Hardware and software integration, power automation, actuator control and sensor integration, simulation testing and prototype deployment.

#### **Mathematics Calculator:**

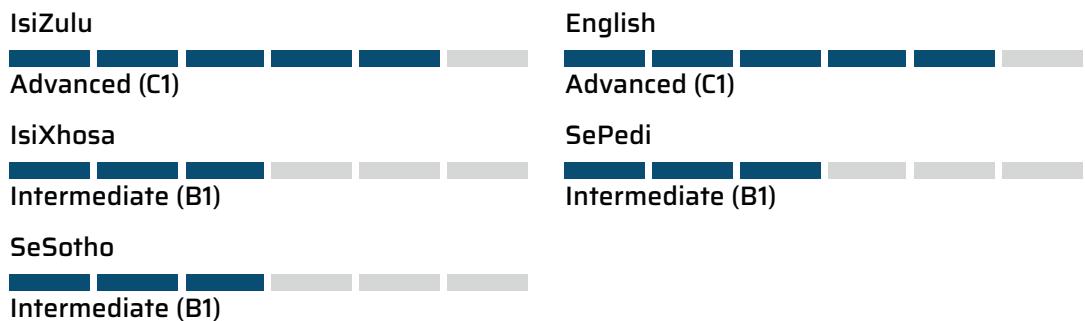
- Objective: Implement algorithm based mathematical calculator using recursion principles.
- Technologies Used: Java and C.
- Skills developed: algorithm design, Logical problem solving and Understanding of function call stacks

#### **CORE MODULES:**

Network Systems  
Database Systems  
Software Design  
Computer Graphics  
Operating Systems  
Embedded systems  
Computer Architecture

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## LANGUAGES



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## PERSONAL INFORMATION

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## REFERENCES

**Mr. Thomas Brown**  
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Relationship: Project Supervisor and Manager  
**Mr. Marco Van Der Sluys**  
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