**EMELY MOKGADI MACHETE**

**Address**: 9418 Monate Street, Olievenhoutbosch, South Africa  
**Phone** **number**: 071 979 8016  
**Email**: macheteemely@gmail.com

**SUMMARY**

I am a final-year Information Technology student at North-West University, completing my degree in November 2025. My passion lies in crafting smart, reliable, and scalable technology solutions through programming, database design, and network simulation. I have built strong foundations in languages like Java, Python, C++, C# and enjoy turning technical challenges into opportunities for learning and collaboration. Now actively seeking entry-level opportunities for 2026, especially in Software development, FinTech, and HealthTech, where I can contribute to innovative projects, grow professionally, and make a meaningful impact through code.

**CORE COMPETENCIES**

* Software development and object-oriented programming
* Database design, modeling and SQL optimization
* Network simulation using cisco packet tracer
* System analysis, UML and ER diagrams
* Technical documentation and project presentation
* Collaborative problem solving and adaptability
* Cybersecurity fundamentals
* Critical thinking in coding

**EDUCATION**

**Bachelor of Science in Information Technology** *(In Progress)*  
North‑West University | Feb 2022 – Nov 2025

**National Senior Certificate (**Matric**)**  
Ikageng‑Barnato High School | June 2020

**ACADEMIC PROJECTS**

* **Eco Events Management System**

*ASP.NET Core · MySQL · C# · MVC*  
Developed a full-stack event planning system with secure login, dashboard, and CRUD operations for events, vendors, and attendees. Integrated data validation, reporting, tooltips, and a user-friendly UI with master pages.

* **Secure Office Network Design**

Designed a multi-zone network in Packet Tracer with routing, subnetting, VPN, and remote access configurations to simulate secure office connectivity.

* **SQL Database System**

Created a normalized Oracle SQL database with a functional front-end. Included validation, interface logic, and user documentation. Delivered final system via Zoom presentation.

* **System Analysis & Design**

Conducted stakeholder interviews and system requirement analysis. Created UML diagrams, ER models, a data dictionary, and development timeline

* **Inventory & Logistics Systems**

Designed and optimized SQL databases for warehouse and logistics operations (Queens' Court & SwiftTrans). Applied 3NF, relational design, and advanced query logic.

* **Virtual Voting System**

Developed a secure online voting platform with login and role-based access. Documented backend logic and implemented security features for data protection.

**TECHNICAL SKILLS**

• Programming: Java, Python, C++, C#, C  
• Web: HTML, CSS, JavaScript, ASP.NET Core  
• Database: Oracle SQL, MySQL, query optimization  
• Networking: Cisco Packet Tracer  
• Tools: GitHub, MS Project, draw.io, Visio, UML, ER Diagrams

**LANGUAGES**

* Sepedi – Native | English – Advanced | isiZulu – Intermediate

**REFERENCES**

Available upon request.