# Siyabonga Ngcobo

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# **Career Objective**

Driven and versatile software and data engineering enthusiast with a passion for building innovative digital solutions. I specialize in full-stack development, data processing, and cloud technologies, and enjoy working in agile, collaborative environments. With a strong background in tutoring, problem-solving, and communication, I'm looking to apply my technical skills to impactful projects and continue learning and growing in the tech industry.

#### **Education**

#### WeThinkCode

Cape Town | NQF Level 5 – Systems Development September 2023 – December 2024

#### North-West University (NWU)

Potchefstroom | BSc in Computer Science and Mathematics (First Year Completed) February 2022 – December 2022

#### **National Senior Certificate**

Matriculated 2017

Bachelor's pass with a distinction in Physical Sciences and Tourism

#### **Skills**

- Programming & Development: Python, Java, C++, JavaScript, C#, SQL, HTML/CSS, RStudio, Flask, REST APIs, OOP, Bash scripting
- Data & Cloud:
  - O Azure OpenAl Service, Power BI, MySQL, PostgreSQL, Web Scraping, Data Cleaning, Pandas, NumPy
- Dev Tools & Systems:
  - O Git, GitHub, Docker, Linux (Ubuntu), Agile methodologies, VS Code, Visual Studio, GitLab
- Digital Tools:
  - O Microsoft Office (6+ years), Google Workspace (4+ years), Canva, Notion
- Soft Skills:
  - Excellent communication, adaptability, problem-solving, critical thinking, time management, teamwork, attention to detail
- Languages Spoken: English, isiZulu, isiXhosa, seSotho, seTswana, isiNdebele

# **Projects**

#### Code Breaker CLI

A command-line tool developed in C++ for breaking codes or solving puzzles, highlighting expertise in C++ and utility tool creation.

#### **Equation Solver**

A Python project focused on mathematical computations and solving equations. Demonstrates proficiency in Python and problem-solving.

#### Student Number Validator

 $A\ project\ aimed\ at\ validating\ student\ numbers,\ show casing\ skills\ in\ data\ validation\ and\ software\ development.$ 

#### **AI-Powered Tutoring Tool**

C# & Azure OpenAI | 2024

Developed a smart education assistant that answers learner queries and assists teachers with generating learning content

## Data Pipeline & Dashboard

Python, SQL, Power BI | 2023

Created a full pipeline to extract, clean, and visualize education performance data

#### **Tutoring Website with AI Chatbot**

JavaScript, Python | 2024

Built an educational support platform for learners to ask questions and receive real-time AI responses

# **Experience**

### Freelance Software & Data Engineering

Cape Town | 2023 - Present

Assisted small businesses with data organization, systems setup, and automation

Created personalized dashboards and tools for productivity

#### Master Maths/Science - Head Tutor (Westville & Durban North)

Durban | Apr 2023 – Sept 2023, Jul 2021 – Feb 2022

Tutored Grade 10–12 Mathematics and Physical Sciences

Trained new tutors and helped structure the science curriculum

#### Master Maths/Science - Tutor (Cape Town)

Cape Town | Feb 2019 - Jun 2021

Delivered group and individual tutoring

Focused on academic growth, conceptual understanding, and learner support

# **Awards & Certifications**

Second Semester 3rd Place - WeThinkCode\_ (All 3 campuses)

Java Fundamentals - Sololearn

Distinction in Physical Science – Promaths

Top 3 Academic Achiever – Igagasi High School

#### **Additional Information**

NQF Level : 5

Driver's License : Not yet obtained

Residency : Cape Town (willing to relocate)

Age : 26

Availability : Immediately available

Citizenship : South African

#### References

Melissa Wang

Owner – Master Maths/Science (Durban North & Westville)

083 435 1185

Hannelie Brinks

Manager - Master Maths (Cape Town)

082 076 4644