

Asandile Nkala

Software Engineer Graduate

060-752-4664 asandilenkala@gmail.com Cape Town, 7750

<https://www.linkedin.com/in/asandile-nkala-37b635256/>

SUMMARY

Hello! I'm a passionate **Software Developer** (Entry-Level) specializing in **Software Engineering**. With a keen interest in solving complex problems and dedication to continuous learning. I thrive in creating efficient and innovative software solutions. My journey in Technology has equipped me with a robust skill set, including proficiency in various Programming Languages and Technologies. I am motivated by the ever-evolving landscape of Software Development and I am committed to contributing to impactful Projects that drive progress and innovation.

TECHNICAL SKILLS

Java, Python, C#, Mongo, Express, React, Node, Relational Database, SQL, Docker, Postman, API's, Agile Methodologies, Git & GitHub, Documentation, Linux Command, Unit Testing, Troubleshooting, Microsoft Office, Troubleshooting.

Soft SKILLS

Adaptability, Communication, Problem-Solving, Teamwork and Collaboration, Time Management, Empathy.

GitHub PROJECTS

[More Projects on GitHub]

Banking System: [Self-Taught]

- This project is a simple Banking ATM System which is built to enable users to log in, view account details, and perform transactions in a simulated banking environment. The user account and transaction data are stored on the database
- **Tools:** Java, Swing, MySQL & JDBC.
- **GitHub Repo:** <https://github.com/asandilenkala/Banking-System>

Poll Application with User Authentication: [HyperionDev]

- This project extends the basic functionality of a poll application by adding user authentication features. Users must register and log in before they can participate in voting.
- **Tools:** Python 3.11, HTML5 CSS Bootstrap,
- **GitHub Repo:** <https://github.com/asandilenkala/Poll-App-and-Authentication>

Django Capstone: [HyperionDev]

- This Project contains the source code for my portfolio website, showcasing my projects, skills, and experiences as a software developer.
- **Tools:** Python 3.11, Docker, Virtualenv,
- **GitHub Repo:** <https://github.com/asandilenkala/django-capstone>

Database Project: [HyperionDev]

- This program is designed for use by a bookstore clerk to manage an inventory of books. The program allows the clerk to add new books to the database, update book information, delete books from the database, and search the database to find specific books. The program interacts with a database called e-bookstore and manages a table named book.
- **Tools:** Python 3.1, SQLite3
- **GitHub Repo:** <https://github.com/asandilenkala/Database-Project>

User Task API: [Self-Taught]

- This project involves the development of a User's and Tasks API. The API is designed to manage users and their associated tasks, providing full CRUD (Create, Read, Update, Delete) operations for both users and tasks. The project is divided into several key parts, each focusing on different aspects of API development, database interaction, and documentation.
- **Tools:** .Net & Sqlite3
- **GitHub Repo:** https://github.com/asandilenkala/User_Task_API

Tic-Tac-Toe Game: [UCT]

- This project is a graphical implementation of the classic Tic-Tac-Toe game (OXO Game) using Python and PyQt5 for the graphical user interface (GUI). It allows two players to connect and play the game over a network
- **Tools:** Python 3, PyQt5
- **GitHub Repo:** <https://github.com/asandilenkala/tic-tac-toe>

Mobile Development Design: [UCT]

- This Android Design App was created by me and my project partner Clifford Silindana, SLNCLI002@myuct.ac.za
- **Tools:** Kotlin, XML
- **GitHub Repo:** <https://github.com/asandilenkala/Mobile-Development-Design>

Monte Carlo Function Optimization: [UCT]

- This project demonstrates the parallelization of Monte Carlo Function Optimization using the Java Fork/Join framework and the divide-and-conquer strategy. The primary goal is to optimize a function by leveraging parallel computation to accelerate the Monte Carlo simulation process.
 - **Tools:** Java, Makefile
 - **GitHub Repo:** <https://github.com/asandilenkala/Parallelizing-Monte-Carlo-Function-Optimisation>
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Experience

Cloud Associate at CAPACITI.

Feb 2025 - Present

- Part of **CAPACITI IT Learnership Programme** in Cape Town.
- Training in cloud infrastructure, deployment, certifications, industry projects.
- Focus on real-world skills and personal growth in a digital economy.

UCT Information System Tutor, Cape Town

2023

- Tutor for INF1002F & INF1002S Course
 - Assisted in Excel & Introduction to Python.
 - Responsible for marking Student's Exercises and their Semester Projects
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EDUCATION

Bachelor of Science in Computer Science & Computer Engineering 2019-2023

University of Cape Town

- Computer Science Status: Completed 1st year and 2nd year 2nd semester.
 - Computer Engineering Status: Completed 1st & 2nd year, also completed 3rd year 2nd semester course but I did not pass 3rd year 1st semester work.
 - **Note: Degree is incomplete, but completing it is part of my goal.**
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CERTIFICATION

HyperionDev Boot Camp

March-October 2024

Average Grade: 98%

Software Engineering Course [NQF Level 5]

- The Software Engineering Boot Camp focuses on core programming skills, web development, databases, and software design. It covers

Python, JavaScript, and SQL, preparing students for real-world software development roles with practical, project-based learning.

CAREER GOALS

- Becoming a Proficient Software Engineer Launching a Tech Company
Expanding My Knowledge
- Build a Strong Portfolio
- Gain Experience

ACCOMPLISHMENTS

MyDomain Salt River Residence [Leadership]:

[2023]

- Deputy Head of Students
- Disciplinary Committee member
- Entertainment Representative

Obtaining my Software Engineering Certificate

LANGUAGES

- IsiXhosa [HL]
 - English [FAL]
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CERTIFICATE

<https://www.hyperiondev.com/portfolio/244218/>