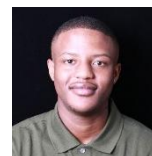


Siphosethu Mifi

BSC HONS COMPUTER SCIENCE IN AI



Professional Summary

I am an enthusiastic and results-driven Computer Science Honours student specializing in Artificial Intelligence, with a strong academic background in Mathematics and Computer Science. My experience includes a highly impactful internship at Amazon Web Services (AWS) as a Software Development Engineer Intern, where I built internal tools for cloud infrastructure using AWS technologies. My core competencies include cloud development, algorithm design, and AI model implementation, complemented by strong communication and educational support skills. I bring analytical rigor, collaborative strength, and a deep passion for developing intelligent systems that solve real-world problems.

Career Objective

To leverage my strong academic foundation in mathematics and computing, along with hands-on engineering and teaching experience, to contribute to the design and development of innovative AI-powered systems. I aim to create real-world solutions that combine machine intelligence, cloud platforms, and human-centered design, while continuing to mentor and uplift others in academic or community-based environments.

Education

2016-2020	Tetelo Secondary School National Senior Certificate (Matric) <ul style="list-style-type: none">2nd Top Achiever in Matric
2021-2024	University of Johannesburg BSc Mathematics and Computer Science <ul style="list-style-type: none">Member of the Golden Key International SocietyMember of UJ JeniusGolden Key Academic Achievement AwardUJ Genius Academic Achievement Award
2025-Current	University of Johannesburg BSc Hons Computer Science in AI

Honors and awards

Throughout my academic and professional journey, I have consistently strived for excellence. The following accolades reflect my commitment to hard work, leadership, and academic merit, and they represent milestones that have shaped both my character and confidence.

June 2021	UJ Jenius Award Academic excellence award for consistently high performance during undergraduate studies.
Feb 2023	Golden Key International Honours Society Recognized among the top 15% of academic achievers in the Faculty of Science.

Feb 2025

Top Achiever Bursary Award

Awarded to high-performing students selected for postgraduate bursary funding.

Experience

My experience spans teaching, mentorship, and professional engineering roles that have strengthened both my technical abilities and people skills. Each role listed below provided a unique environment in which I learned to lead, solve problems creatively, and work collaboratively within teams.

2021-2021

Numeric

Mathematics Coach

- Trained in teaching methods focused on math instruction for Grades 7–10.
- Delivered foundational math concepts in interactive classroom settings.
- Received certification for completion of the Numeric Coach Training Programme.

2024-2024

University of Johannesburg

Mathematics Tutor

- Tutored first-year undergraduate students in calculus, linear algebra, and statistics.
- Provided one-on-one academic support and group workshops.
- Developed simplified explanations for complex mathematical theories.

2024-2025

Amazon Web Services (AWS)

Software Development Engineer Intern

- Interned within the EC2 Core Cloud Management Database (CMDB) team.
- Developed an internal tool to automate infrastructure tasks for the CMDB team using a suite of AWS services.
- Designed, implemented, tested, and deployed the tool independently.
- Collaborated with engineers in a cloud-native, distributed systems environment.
- Gained proficiency in scalable backend system design and agile methodologies.
- Participated in mentorship programs and engineering best-practice workshops.

Skills

Through my academic training and hands-on work, I've developed a broad and practical skill set that combines programming, AI, cloud engineering, and educational communication. These skills empower me to approach complex challenges from both a technical and human-centered perspective.

Programming Languages

Java	<div></div>	96%
C++	<div></div>	89%
R (Statistical Programming)	<div></div>	90%
Python	<div></div>	96%
Ruby	<div></div>	67%
HTML	<div></div>	73%

AI and Mathematics	Machine Learning	<div><div></div></div>	69%
	Optimization	<div><div></div></div>	64%
	Probability Theory	<div><div></div></div>	79%
	Statistical Inference	<div><div></div></div>	81%
Software Development	End-to-End system Design	<div><div></div></div>	79%
	Code Review	<div><div></div></div>	90%
	Agile/Scrum	<div><div></div></div>	76%
Cloud Technology	AWS (Lambda, S3 etc.)	<div><div></div></div>	79%
	CI/CD Pipelines	<div><div></div></div>	73%
	GitHub	<div><div></div></div>	75%
Data Structures & Algorithms	Graphs	<div><div></div></div>	81%
	Trees	<div><div></div></div>	89%
	Sorting	<div><div></div></div>	86%
	Searching	<div><div></div></div>	79%
	Recursion	<div><div></div></div>	86%
Education & Communication	Public Speaking	<div><div></div></div>	68%
	Mentoring	<div><div></div></div>	70%

Research Experience

2025-Current	<p>Title: Optimizing Feature Extraction in Object Detection using Genetic Algorithms</p> <p>Focus: Combining evolutionary computing with AI to improve image recognition accuracy and computational efficiency.</p> <p>Technology: Python, OpenCV, YOLO, Scikit-learn, TensorFlow.</p> <p>Research Supervisor: Ogwok, Daniel Email: danielo@uj.ac.za</p>
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Languages

English	<div><div></div></div>	93%
Sesotho	<div><div></div></div>	96%
IsiZulu	<div><div></div></div>	89%
Xhosa	<div><div></div></div>	65%
Xitsonga	<div><div></div></div>	53%

Professional training

2021 - 2021	<p>Numeric Mathematics Coach Training</p> <p>We were trained in how to teach mathematics to primary school learners, how to formulate lesson plans and how to have an efficient class of kids.</p>
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References

- Werner Olivier Software Engineering Manager, Amazon Web Services (AWS)
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