SAMUKELO MKHIZE

CONTACTS

+27 78 504 6753

samkelomanager@gmail.com

Durban, KwaZulu-Natal 4091, Durban, 4091, South Africa

SKILLS

- Programming Languages: Python, Java, C++, C#

- Machine Learning & AI: TensorFlow, PyTorch, Scikit-Learn, NumPy, OpenCV, Pandas, Matplotlib, Seaborn

- Database Management: SQL, MySQL, Microsoft SQL Server

- Tools & Technologies: Power BI, Git, Linux, Docker, .NET

- Problem-Solving

- Teamwork

- Adaptability

- Time Management

- Analytical Thinking

LINKS

GitHub Profile:
github.com/Samukelo09

LinkedIn:
https://www.linkedin.com/in/samukelo-mkhize-a831...

HOBBIES

Building tech side projects
Tutoring and peer mentoring
Reading tech and growth books

REFERENCES

Paul Kogeda
University of KwaZulu-Natal
E: Kogeda0@ukzn.ac.za

ABOUT ME

Motivated and analytical Computer Science Honours student with a solid foundation in software development, artificial intelligence, and data analysis. Proficient in programming languages including Python, Java, C++, and C#, with hands-on experience in machine learning frameworks such as TensorFlow and PyTorch. Skilled in full-stack web development, database management, and using tools like Power BI, Git, and Docker. Demonstrates strong problem-solving abilities, effective communication, and a commitment to continuous learning. Actively seeking opportunities to apply technical expertise and collaborative skills in real-world projects while continuing academic advancement.

PROFESSIONAL EXPERIENCE

Undergraduate Tutor, University of KwaZulu-Natal, KwaZulu-Natal
Jan 2023 - Present

- Assisted undergraduates in programming, data structures, and AI.

- Explained complex topics such as finite automata, Turing machines, and algorithm efficiency.

- Developed structured lesson plans and provided one-on-one mentorship.

EDUCATION

Bachelor of Science Honours in Computer Science, University of KwaZulu-Natal, KwaZulu-Natal
2025

- Modules: Image Processing & Computer Vision, Artificial Intelligence, Machine Learning, Ontologies & Knowledge Bases, Quantum Computing, Internet of Things, Honours Project.

Bachelor of Science in Computer Science & Information Technology, University of KwaZulu-Natal, KwaZulu-Natal
2024

- Notable Modules: Artificial Intelligence, Applied Systems Implementation, Data Structures, OOP.

PROJECTS

Machine Translation (isiXhosa-English/English-isiXhosa), Durban
- Built a neural machine translation model using PyTorch and Hugging Face Transformers.

- Fine-tuned pre-trained models on a parallel Xhosa-English dataset with custom preprocessing.

- Tools: PyTorch, Transformers, SentencePiece, spaCy.

Coin Recognition, Durban
- Designed computer vision system for identifying South African coins from images, employing Convolutional Neural Networks (CNNs).

- Processed images and trained models to achieve 83% recognition accuracy.

- Tools: Python, Scikit-learn

Cloud Computing Ontology, Durban
- Architected a semantic ontology using OWL 2 DL and Protege to model cloud resources and services, enhancing interoperability/ resource discovery.

- Mapped service relationship using Description Logic (DL) and RDF/XML.