

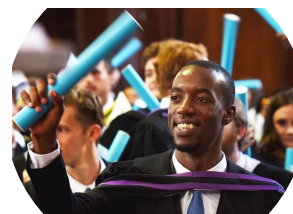
Moment Vikani Mahlangu

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GitHub <https://github.com/Momzit>



SUMMARY

A motivated, strongly disciplined graduate, passionate about building data models, analyzing trends, and working on algorithms that solve problems more efficiently. Relevant skills include analytical and quantitative skills, strong communication skills, problem solving, programming, and creative thinking.

TECHNICAL SKILLS

Operating System: Windows, Linux

Languages: Python, Django, Java, C++, JavaScript, HTML, CSS

Tools: PyTorch, OpenCV, NumPy, Pandas, React js, PyTest, Django, SQL

Other: Version Control, Web, and ML

GENERAL SKILLS

Data Visualization, Machine Learning, Data Analysis, Database structures, Statistical analysis, Algorithm development, Data science, Tutoring, Web development, Research, Lab assistant.

EDUCATION

Applied Physics - 2019 - present

Master, The University of Cape Town - Cape Town, SA

Thesis Using Monte Carlo simulations in Gèant4 to improve image reconstruction of PET measurements of bubbles.

Applied physics - 2017

Honors, The University of Cape Town - Cape Town, SA

Thesis Image reconstruction in PET measurements

Physics - 2012 - 2016

Bachelor, The University of Cape Town - Cape Town, SA

Thesis

AWARDS

- South African Institute of Physics (SAIP): Best Applied Physics MSc: Siddon reconstruction of a point source for UCT PET detector - 2019.
- Deans merit list - 2012.

WORK EXPERIENCE

Miscellaneous / Jan 2021 - present

Self taught web developer and data scientist through various online courses and projects. My github, <https://github.com/Momzit>, shows some of the projects I have worked on and working on.

Python Django React js Java Javascript
Pandas PyTorch scikit-learn

Head tutor / Feb 2019 - Nov 2021

University of Cape Town - Cape Town, SA

Key responsibilities involved writing and publishing solutions to student's weekly problems sets, hold two help sessions a week, online and face-to-face, facilitate white board tutorials and lab experiments, help mark students tests and exams.

Leadership communication presentation
good lab practices lab safety.

Intern / Jun 2018 - Nov 2018

South African National Space Agency - Hermanus, SA

I worked in the science advancement unit in which my task was to design and come up with creative and fun experiments for less privileged schools that are aligned with their syllabus so as to help demonstrate physics concepts to learners for a better understanding of STEM related subjects.

Leadership Critical thinking Problem solving
Design Development and management

Data Analyst / Apr 2018 - Jun 2018

Old Mutual - Cape Town (Mutual), SA

I was presented with big insurance data to sort, analyze and update the database with the correct and up to date information to be readily used by other departments.

Excel VBA



ACTIVITIES / INTERESTS

Proactive about learning diverse things and happy to discuss those. Favorite physical activities would be gym and hiking and I am a great chess player.



PROFESSIONAL REFERENCES

- **Katie Cole** - katie.cole@uct.ac.za.
MSc Supervisor

Landline: 021 650 3344

- **Steve Peterson** - steve.peterson@uct.ac.za.
Core supervisor
Landline: 021 650 2377
- **Dale Tylor** - dl.taylor@uct.ac.za.
First year physics course convener
Landline: 021 650 3367