Thupane Jack Kgwale

+27 71 477 8448 | <u>jackteekgwale@gmail.com</u> | LinkedIn <u>JackKgwale</u> | Midrand, Johannesburg, Gauteng, Code 10 driving license

PROFESSIONAL SUMMARY

I am a BSc graduate in Geography and Environmental Science from the University of Pretoria with expertise in disaster risk reduction, and environmental sustainability. Proficient in GIS, ENVI, ArcGIS, and QGIS, I specialize in spatial modeling and remote sensing for assessing climate-induced displacement and migration patterns.

My skills in statistical analysis (R, Python) support data-driven decision-making for sustainable solutions. As the leader of the Water From A Rock Initiative (WAFARI), I have implemented flood preparedness initiatives, engaged with stakeholders, and driven community-based research to enhance climate resilience.

WORK EXPERIENCE

Student Assistant – Poultry Farming | University of Pretoria | Aug 2024 - Dec 2024

- Assisted in daily poultry operations, including feeding and health monitoring.
- Maintained biosecurity standards to ensure flock health and safety.
- Supported data collection on flock performance and productivity.
- Contributed to improving productivity and welfare through diligent observation and record-keeping.

Project Leader | Water From a Rock Initiative | Global Water Partnership Southern Africa | Jun 2023 - Aug 2024

- Successfully led a project that won the Global Integrated Flood and Drought Management Competition in 2023.
- Implemented early warning systems to inform and involve university students in disaster resilience.
- Utilized innovative geofencing techniques to develop resilience against natural disasters.
- Coordinated this worldwide program with GWP, WMO and Water Network focusing on integrated drought management.

Assistant Manager | YouthMappers | University of Pretoria | Feb 2022 - Jun 2023

- Contributed to mapping South Africa, fostering community development and knowledge sharing across Africa.
- Demonstrated abilities in Geographic Information Systems (GIS) and other mapping technologies.
- Collaborated with OpenStreetMap Africa in an initiative aimed at community development.
- Gained valuable experience in project management and teamwork.

Volunteer | Mphahlele FM | Community Radio Station | Jan 2020 - Jan 2022

- Played a pivotal role in the production process, contributing ideas, creativity and dedication.
- Built a distinct identity for the station by infusing advertisements with a unique voice and charm.
- Developed a keen understanding of audience preferences, boosting the station's resonance with the listeners.
- Promoted a sense of unity and connection within the local community through targeted programming.

TECHNICAL PROJECT EXPERIENCE

Water from A Rock Initiative

- Took charge as the Project Leader, driving the project towards a successful outcome.
- Implemented early warning systems & geofencing for disaster resilience.
- Led the project to win the Global Integrated Flood & Drought Management Competition in 2023.

OSM Africa Monthly Mapathon

- Contributed significantly to mapping South Africa, enhancing community development and collaboration.
- Prioritized knowledge sharing amongst OSM communities across Africa.
- Established improved mapping techniques for future initiatives.

EDUCATION

SKILLS & INTERESTS

Geospatial & Environmental Analysis: GIS (ArcGIS, QGIS, ENVI) • Remote Sensing, Spatial Modeling

Data & Research: Data Collection & Analysis • Statistical Analysis (R, Python) • Remote Sensing Image Processing • Land Surveying • Field Data Collection

Project & Risk Management: Environmental Impact Assessment (EIA) • Disaster Risk Reduction (DRR) • Natural Resource Management • Risk Assessment • Project Planning

Technical & Communication: Data Visualization & Interpretation • Report Writing • Policy Analysis • Environmental Governance • Stakeholder Engagement • MS Office • Computer Literacy

Soft Skills: Leadership • Problem-Solving • Critical Thinking • Verbal and Written Communication • Collaboration • Pays attention to details • Facilitation • Interpersonal Skills • Coordination • Organizational Skills • Proficiency in English (both spoken and written)

Governance Knowledge: Good understanding of environmental legislation of local government • Familiarity with intergovernmental relations between national, provincial, and municipal structures • Understanding of government planning processes

CERTIFICATION

ISO 14001:2015 - Environmental Management Systems (EMS) | 2025

ISO 45001:2018 - Occupational Health and Safety Management | 2025

Machine Learning in Weather and Climate - MOOC | 2023

REFERENCE

Associate Professor, University of Pretoria

Prof Thando Ndarana Phone: +27 76 778 3347

Email: thando.ndarana@up.ac.za

Senior Lecturer, University of Pretoria

Prof Liesl Dyson

Phone: +27 12 420 2469 Email: liesl.dyson@up.ac.za

PhD Candidate, University of Pretoria, Animal Sciences Department

Judi Rosenstrauch Phone: +27 82 667 9052

Email: jmrosenstrauch@gmail.com