

The University of KwaZulu-Natal (UKZN) is committed to Employment Equity. Preference will be given to applicants from the designated groups in accordance with our Employment Equity Plan.

COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE

**POSTDOCTORAL RESEARCHER: Big Data Analytics for Early Warning Systems
ONE YEAR FIXED-TERM APPOINTMENT RENEWABLE
School Of Agricultural, Earth and Environmental Sciences
PIETERMARITZBURG CENTRE**

REF NO. CTAFS03/2021

The Centre for Transformative Agricultural and Food Systems (CTAFS) has partnered with the South African Weather Service to develop an Integrated Climate-Driven Multihazard Early Warning System (ICMHEWS) as part of a 3-year project funded by the Government of Flanders. The project seeks to appoint a dynamic, innovative and self-motivated professional with a specialisation in Data Sciences in a multidisciplinary set-up to lead work on integrating remote sensing data, advanced climate information, crop/agro hydrological models and machine learning tools for early warning systems, making informed decisions on climate risk management, climate change adaptation and food systems transformation. The candidate is also expected to contribute to project deliverables and publish their research findings in accredited journals. As part of our multidisciplinary team, the successful candidate will be exposed to exciting research challenges and get many opportunities to foster their career growth through innovative solutions. Appointment will be on a 1-year fixed term appointment subject to satisfactory performance and budget availability.

Minimum Requirements

- PhD related to big data analytics and/or PhD in specific earth-related disciplines (e.g. agrometeorology, crop science, geography, Remote Sensing, hydrology/hydrometeorology), with evidence of Big data analytics experience.
- A proven research record as evidenced by recent publications in peer-reviewed ISI/DHET rated journals.
- Strong programming in e.g., R, Python, MATLAB and scripting skills.
- Computer simulation and/or statistical modelling skills
- Experience in working in multidisciplinary teams.

Other desirable attributes relevant to the post include a background in analytical GIS and or remote sensing skills, experience in development of web applications and parallel programming and a valid driver's licence.

Enquiries and details regarding this post may be directed to Prof Tafadzwa Mabhaudhi at email: mabhaudhi@ukzn.ac.za

The closing date for receipt of applications is 31 July 2021. However, this advert will remain open until the position is filled.

Applicants are required to submit the following: (1) CV with publication record, (2) letter of motivation, (3) Full academic records, and (4) contact details of two academic referees to Nopayi Mkhize, email: MkhizeN34@ukzn.ac.za

The advert Reference Number MUST be clearly stated in the subject line.