The University of KwaZulu-Natal (UKZN) is committed to Employment Equity with the intention to promote representativity within the Institution. Preference will be given to applicants from the designated groups.

<u>**COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE**</u>

TWO POST-DOCTORAL FELLOWSHIP
June 2025 – May 2026
Department of Electrical, Electronic and Computer Engineering, Howard College,
University of Kwazulu-Natal, Durban - 4041, South Africa.

REF NO.: EECE/CE/2025-1

Founded in 1910 as the Natal University College in Pietermaritzburg, the University of Natal was granted independent university status in 1949 owing to its rapid growth in numbers, its wide range of courses, and its achievements and opportunities for research. The distinctive Howard College building was opened in 1931. The University of KwaZulu-Natal (UKZN) is one of the largest, oldest, and most transformed universities in sub-Saharan Africa – a teaching and research-led university. UKZN has an international reputation for academic excellence, outstanding research output, and African scholarship. It has links with over 250 international institutions, which facilitate ongoing collaborative academic partnerships.

In line with its research vision and mission, the Discipline of Electrical, Electronic, and Computer Engineering invites applications for Postdoctoral Research Fellowship position in **Computer Engineering.**

We explore applications of the exciting fields of Computer Vision and Machine Learning to solve real life problems. We are seeking a highly motivated Postdoctoral Researcher to develop models that leverage the power of Graph Neural Networks for Environmental Data Modeling and Analysis. The focus will be on identifying key trends, projections, and machine learning techniques to address pressing environmental challenges such as climate modeling, biodiversity conservation, and sustainable resource management. This is a unique opportunity to contribute to impactful research that contributes to the formulation of awareness and mitigates effects of climate change and natural disaster. The main responsibilities of the successful candidate will be the following:

- Develop and implement machine learning models for analyzing data on built environment, natural habitat and ecosystems.
- Collaborate with a team of researchers and industry partners.
- Publish findings in high-impact journals and present at conferences.
- Contribute to grant writing and funding proposals.

Duration and Salary:

The post-doctoral fellowship is for 12 months, worth R200 000 per annum. It can be extended further one year, depending on the performance of the successful candidate.

Minimum Requirements:

- Doctoral degree (PhD) in Computer Engineering, Computer Science, Electronic Engineering or related fields, that should have been completed within the **past three years**.
- Applicants must be willing to travel to the host university (i.e., University of KwaZulu-Natal, South Africa).
- Applicants must have good oral and written communication skills.
- Bachelor's and/or Master's in Electronic Engineering / Computer Engineering / Computer Science or related areas.
- Applicants must be under the age of 35 years.
- An adequate number of publications in the relevant area of expertise.
- The ability to contribute to UKZN's mission and vision in terms of research.

Procedures and Dates:

1. Covering letter,
2. Curriculum Vitae
3. Project Proposal (related to Graph Neural Networks for Environmental Data Modelling and Analysis),
4. Aapplicant's doctoral degree certificate or PhD award letter

Enquiries

Prof. Jules R. Tapamo (tapamo@ukzn.ac.za) and Prof. Viranjay M. Srivastava (srivastava@ukzn.ac.za)

Applications submission

Applications should be addressed to Ms. Dumisile Pretty Ngcobo

(Ngcobod@ukzn.ac.za)

The **subject line** must clearly indicate Ref. no.: '*EECE/CE/2025-1 Post-Doctoral Fellowship – Your Surname*'

Applicants who do not meet the minimum requirements will not be considered.

The closing date for receipt of applications is **Monday, 21 April 2025.**

Only shortlisted candidates will be contacted/communicated till **Monday 28 April 2025.**

The interview will take place in the **First week of May 2025.**

For selected International candidates, VISA should be applied till **4th week of May 2025.**

Tentative joining will be from **June/July 2025.**

Useful Links:

About UKZN: www.ukzn.ac.za/about-ukzn/promotional-video/

NOTE - The research group reserves the right not to make an appointment for this advert. Should you not receive a reply or update by the 05 May 2025, kindly consider that your application has not been successful.