



AIMS

African Institute for
Mathematical Sciences
SOUTH AFRICA

MACHINE LEARNING RESEARCHER

EARTH OBSERVATION AND ECOLOGY

The African Institute for Mathematical Sciences (AIMS) South Africa is looking to hire a skilled and motivated Machine Learning Researcher to join our team in Cape Town. The successful candidate will play a key role in developing innovative machine learning algorithms and models to analyze satellite imagery, Earth observation and remote sensing data (e.g. acoustic monitoring and camera traps). Use cases could include disease modelling and prediction, and wildlife monitoring tasks. Recent trends in deep learning open up large potential for impactful research by harnessing the vast data volumes related to Earth observation and remote sensing. The researcher will have a flexi-role: work closely with CLIMADE (<https://climade.health/africa/>) on projects related to climate change and the spread of vector borne disease, and contribute to research in machine learning for ecological tasks.

What we are looking for:

- Ph.D. in machine learning, computer science or related field.
- Experience in collecting and processing satellite data, e.g. Sentinel-2 or Landsat-8.
- A track record of research and scientific discovery, including publications related to deep learning.
- An ability to communicate research to scientific and public audiences.
- Experience in developing, debugging and publishing research code.

What you will do:

- You will lead and pursue a long-term ambitious research agenda related to machine learning using Earth observation data (focusing on arboviral diseases in Africa) or with remote sensing data (audio, camera traps).
- You will share research findings clearly and efficiently both internally at AIMS and externally to the research community and public, verbally and in writing.
- You will enjoy working in a multi-cultural pan-African environment, 50 metres away from Cape Town's #1 surf spot.

If you love making connections between people and ideas, if you love starting new things, enjoy scientific freedom, and you are excited about the idea of advancing machine learning in Africa, then this job is for you. AIMS has a social mission. There are opportunities to participate in activities related to AIMS and the research centre.

To apply, please e-mail the below documents in three pdf files to our recruitment team at ml-positions@aims.ac.za:

- Curriculum Vitae (CV)
- Cover letter detailing your relevant experience in working with Earth observation data and machine learning
- Proof of Ph.D. completion

There is no application deadline, and the position will be filled when a suitable candidate is found.

Questions about the position may be addressed to ml-positions@aims.ac.za.

