



UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIVESITHI YA
FREISTATA

EU Horizon Funding Call for Advanced Local Digital Twins using AI for Early Warning and Preparedness

The EU has opened a call that focuses on Advanced Local Digital Twins using AI for Early Warning and Preparedness (IA).

The EU encourages proposals developed with partner universities that appear on its official list. Thus, building a solid, multidisciplinary team with these partners from the EU and Africa will put us in a strong position.

The programme aims to support the development, testing, and large-scale validation of advanced AI algorithms integrated into local digital twins (LDTs) to improve flood prediction, preparedness, and urban resilience. Projects will use dynamic, high-resolution modelling to simulate flood scenarios, predict damage, and support decision-making in real-world urban contexts.

Proposals should

- develop innovative, flexible AI algorithms that use dynamic urban descriptors;
- integrate these algorithms into high-resolution hazard models for accurate local flood simulations;
- prioritise frugal, local AI to reduce energy consumption and ensure functionality in low-connectivity environments; and
- follow open-source principles, software, hardware, and data, ensuring transferability, reuse, and long-term impact.

Please note that the EU submission deadline is 15 April, which means that our internal deadline must be 6 April to allow time for institutional processes.

This call is a great opportunity to do meaningful and influential research that supports global policy while strengthening our institutional footprint. Should you wish to discuss this call, please feel free to respond to this email. I will gladly visit you in the faculty.

For additional information, please click on the [link](#).