

PROBLEM STATEMENT

Land-based sensors, including radar sensors, collect similar data along the coastline

KAVIYAA K

The development of hazard maps to the detection of events in real time, the provision of situational awareness and decision support, and beyond

Awareness, education, preparedness, and prediction and warning systems can reduce impacts of a natural disaster

To develop a more robust adaptation and response capability to disasters as part of development planning.

Developments in technology are helping in monitoring hurricanes and foreseeing the path of hurricanes, which can assist in mitigation efforts.

Artificial intelligence can enhance our ability to manage natural disasters. However, understanding and addressing its limitations is required to realize its benefits. Here, we argue that interdisciplinary, multistakeholder, and international collaboration is needed for developing standards that facilitate its implementation.

KAVIYA R

THE DATA CONTAINS IMAGES AND INFORMATION ABOUT THE LOCATION AND SITUATIONS IN A LOCALITY, WHICH IS RECOGNIZED BY THE AI. SUCH SYSTEMS CAN BE USED TO MONITOR AND PREDICT THE DAMAGE DONE BY FLOODS ALONG WITH OTHER METHODS.

When using AI to detect extreme events such as avalanches or earthquakes, the availability of data can be a limiting factor. AI-based methods can be very effective if a training dataset covers very large events. However, the availability of such data is limited because of the rarity of these events

AI-BASED SYSTEMS LOOK FOR CHANGES IN THE IMAGES TO PREDICT THE RISK OF DISASTERS SUCH AS EARTHQUAKES AND TSUNAMIS.

Climate change is increasing the frequency, intensity and magnitude of disasters, leading to a higher number of deaths, injuries and

Nature-based solutions, such as conserving forests, wetlands and coral reefs, can help communities prepare for, cope with, and recover from disasters, including slow-onset events such as drought.

Resavarthini P

Investment in natural infrastructure is underexplored in policies aimed at reducing risk. There is an urgent need to invest in nature-based solutions to disaster to minimize our vulnerability to future events.

NATURE CAN BE A COST-EFFECTIVE AND NON-REGRET SOLUTION TO REDUCING RISKS FROM DISASTERS, COMPLEMENTING CONVENTIONAL ENGINEERING MEASURES SUCH AS SEA WALLS AND STORM CHANNELS.

Resavan

Through combining Global Navigation Satellite System data with AI, scientists have been able to predict tsunami amplitudes without characterizing the triggering earthquake

The AI analyzes the data to learn about the patterns of various earthquakes and can then predict where an earthquake and aftershock might hit

AI can also enhance earthquake detection and tsunami warning using geological information from research centres around the world. Building up reliable datasets for such events is crucial, webinar speakers said. Wildfires can also be studied in real time and detected earlier based on multi-sourced data

Natural disasters cannot be prevented, but some can be predicted, allowing humans to engineer and design solutions for minimizing the impact of natural disasters.