



Abstract review

Webinar_01 : December 2nd, 2020

Session time slot: 9:00 to 11:00 am (UTC+1 France time zone)

Artificial Intelligence Use in Disaster Risk Reduction and Resilience

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The Philippines is prone to weather-related and other natural geological events mainly due to its location. It is situated along the typhoon belt and the Pacific Ring of Fire, a zone of active volcanism and intense earthquake activity, rendering the country as a hotbed of disasters. Fatalities and property damage from yearly calamities persist despite large-scale resilience efforts with no sight of abatement especially with the projected adverse impacts of Climate Change. Recognizing the potential of Artificial Intelligence (AI) in risk reduction because of its ability to quickly and intelligently analyse large datasets, the country has embarked on the use of this technology to effectively manage disasters. This paper discusses the potential and actual examples on the use of AI in disaster risk reduction and humanitarian efforts in the Philippines, such as predicting rainfall with better accuracy, flood forecasting, flood modelling using neural networks, identification of features in remotely sensed imagery, and the use of chatbots during the Covid-19 pandemic. We highlight the importance of pursuing this technology, which is an invaluable tool to improve the outcomes of disaster risk reduction management and climate change adaptation to build resilience in the country.

Geoheritage as a tool for Resilience

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Resilience is society's capacity to be prepared for, absorb and recover from events. In this case we are primarily concerned by natural events, and resilience avoids these becoming disasters. Geoheritage is about knowing, valuing and managing the natural, geological environment. It provides a tool to increase resilience by bringing natural features more into the lives of people, increasing their understanding, and their individual and collective ability to deal with events. The UNESCO International Geoscience Programme project 692 'Geoheritage for Geohazard Resilience' is designed to develop this link. Projects around the world are being developed and the best practice shared globally. I'll briefly describe the project and the philosophy behind it, and show some star initiatives, such as the Ruta del Sillar, Peru, or the Dallol volcano project in Ethiopia.