The KIOS Center of Excellence at the University of Cyprus coordinates an EU project to set up an Artificial Intelligence Knowledge Network to assist with Disaster Management

The KIOS Research and Innovation Center of Excellence at the University of Cyprus is coordinating a new European project entitled “ARTION: Artificial Intelligence Knowledge Network”, with the aim to develop a world class network for knowledge sharing in the area of Artificial Intelligence for disaster management. The network will promote the development and use of Artificial Intelligence (AI) tools that can help first responders to manage disasters, such as forest fires, floods, and earthquakes.

Natural disasters threaten millions of people around the world and the dramatic changes in the global climate are likely to worsen the situation. For example, the global annual average economic loss for floods is estimated at US $104 billion and over the last decade, deadly floods affected over 1.4 billion people. The introduction of novel AI technology to support first responders and enable “collective intelligence”, can greatly assist in the management of such disasters.

In disaster management operations, the wealth of data that first responders are increasingly able to collect (from dedicated sensors and external sources), can prove invaluable in the disaster management cycle (e.g., used for forecasting and rapid assessment, informed decision-making and improved efficiency), and result in significant reductions in the risk and impact of disasters. The innovative network "ARTION" aims to consolidate and review Artificial Intelligence algorithms for three specific scenarios: forest fires, floods, and earthquakes.

The network’s activities and results aim to bring together Artificial Intelligence scientists and disaster management experts and practitioners, in order to build capacity and competencies of first responders in the use of AI technology, share knowledge and data, and stimulate further AI research towards application-specific challenges faced throughout the disaster management cycle.
“ARTION” is a strategic partnership between the KIOS Center of Excellence of the University of Cyprus (that has a strong background in ICT technologies and AI), the University of Lille in France (with advanced expertise in data analytics and visualisation), the Space Research Centre of the Polish Academy of Sciences (established first-responders training and advising body), as well as Civil Protection agencies, including the Cyprus Civil Defence with ample experience in organizing the Union Civil Protection Mechanism training courses (including the Assessment Mission Course) and exercises (including several module exercises), and the Civil Protection of the Autonomous Region of Sardinia in Italy with extensive expertise in disaster risk forecasting.

The KIOS CoE research team at the University of Cyprus participating in this project is led by Professor Marios Polycarpou and is complemented by the Research Assistant Professor Panayiotis Kolios and the Research Associate Dr. Maria Michalopoulou.

Website: https://www2.kios.ucy.ac.cy/ARTION/

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