











Project ARTION consortium members: *University of Cyprus, Centrum Badan Kosmicznych Polskiej Akademii Nauk, Cyprus Civil Defence, Universite de Lille, Regione Autonoma della Sardegna* are pleased to invite you to a training on the subject of the

PRACTICAL UTILISATION OF AI TOOLS IN EMERGENCY MANAGEMENT.

About the Topic:

Recent technological advancements have made it possible to collect huge amounts of data regarding various disasters, that can be invaluable in gaining situational awareness and helping stakeholders make the right decisions both before and after a disaster happens. However, such stream of data might become difficult to make sense of, especially in time-critical and time-varying situations.

It is necessary to develop intelligent systems that can aid humans in such situations. **Artificial Intelligence (AI)** can be used to analyse the large volumes of heterogeneous spatiotemporal data in critical time-bound situations, in turn providing high-level actionable information which stakeholders and emergency responders can process effectively.

Practical utilisation of Al Tools in Emergency Management

14.06.2022 (Tuesday), 10.00 CET

Online, free, registration required

In a nutshell: a training about utilisation of artificial intelligence in disaster management:

- ✓ Digestive in form and informative enough for more advanced users.
- ✓ For crisis management practitioners, researchers and policymakers with an interest in innovation.
- ✓ Registration for the event is free of charge.

Register on the CMINE platform (account not required) or directly via: kdabrowska@cbk.waw.pl

The event will be held virtually, and will consist of two parts:

- **Training¹** session aiming at explaining the topic and pointing attendees towards promising solutions, focusing on first responder and emergency manager perspective.
- Presentation of Disaster Management AI Portal and AI tools created in the framework of ARTION and other relevant activities.

The training session will cover the following aspects: motivation behind the employment of AI for disaster management (practical highlights of the usefulness), an introduction to AI providing a brief background on this scientific field, a selection of topics on AI for disaster management and a detailed approach on testing and evaluating AI technologies for disaster management.

About the ARTION Project:

Project ARTION (Disaster Management Artificial Intelligence Knowledge Network), aims at facilitating the knowledge sharing in the area of artificial intelligence for disaster management and wishes to guide the development and use of AI tools by first responders across Europe.

ARTION aspires to bridge the gap between AI scientists and disaster management experts, build capacity and competency 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. For more information (or to get our datasets or free training materials), please visit our web portal.

¹ Training materials presented, together with Training manual supporting them, are available on the project web <u>portal</u>. We encourage their download and further use.















Project ARTION: Practical utilisation of AI tools in emergency management. Training, 14.06.2022

Introduction 10.00 – 10.15

Project ARTION in a nutshell: short introduction, event agenda.

One of the four strategic pillars of ARTION is devoted to training and networking aiming to upskill first responder stakeholders by exemplifying AI technologies, detailing the data collection and analysis procedures and setting the expectations on what can be achieved by AI tools.

Training: Al 10.15 – 12.30

The training material covers the following aspects:

- An introduction highlighting the usefulness and motivation behind the employment of AI for disaster management.
- An introduction to AI providing a brief background on this scientific field.
- A selection of topics on AI for disaster management.

Training: Al evaluation 12.30 – 13.30

Testing and Evaluating AI technologies for disaster management

A guide to organising structured trials of AI solutions by utilising a detailed approach on testing and evaluating AI technologies for disaster management — Trial Guidance Methodology developed in DRIVER+ project and lessons from implementing it.

Presentation of **Disaster Management Al Portal** and **Al tools** created in the framework of ARTION:

- The aerial person detector
- The ARTION mobile app

Project ARTION developments

Project ARTION field exercises were organised to collect the data and to evaluate the effectiveness of the proposed AI solutions. Those datasets are available and can be used by any practitioner or scientific actor to assess existing solutions and develop different response strategies. Each of those three events will be presented and discussed, including event background description and gathered data showcase.

13.30 - 15.00

Novel datasets and AI tools, AI technology evaluation Report and structured overview of the existing work based on the systematic literature review. As the amount of existing scientific work is already vast, the systematic reviews are crucial to act as guides for the interested scientists to acquire information about the state-of-the-art in the field, and for the interested researchers to identify gaps and open problems and deliver novel methods and results.

