



UNIVERSAL DESIGN OF ICT IN EMERGENCY MANAGEMENT – IDENTIFYING AND ADDRESSING ICT CHALLENGES FACED BY ELDERLY AND PEOPLE WITH DISABILITIES

Universal Design including accessibility and usability of ICT tools in an emergency can ensure that information is flowing freely to the broadest possible diversity of the public, including the elderly and people with disabilities.

Universal Design of ICT in emergency management is becoming an emerging area of research within the ISCRAM community. The primary objectives of the track are to understand the implications of ICT for elderly and people with disability in emergency management, uncover how ICT can contribute to remove barriers, and bring together relevant researchers and practitioners to ensure access to information for all in an emergency situation. This special track is closely related to the main theme of the ISCRAM 2019 conference “*Towards individual-centric emergency management systems*”. Personalised and adaptive ICT systems for emergency management will need to also benefit the elderly and people with disabilities. Their involvement in the design, development and evaluation process of the ICT systems will ensure that these systems are usable and accessible in emergency situations.

Scientists and practitioners concur that appropriate ICT technology can improve disaster management and crisis communication in all cycles: preparedness, response and recovery in terms of the needs of people with disabilities [1]. Therefore, information sharing and crowdsourcing tools are emerging as important factors in disaster resilience, and it is essential that these tools are accessible and usable for as many potential users as possible.

Wireless technologies, augmented reality, and assistive technologies, among others, have the potential to empower people with disabilities regarding individual preparedness (technology outreach), response (warning and reaction), recovery (locating accessible shelters) and mitigation (ICT systems and technologies integrated into post-disaster reconstruction). Better access to crisis terminologies can improve shared understanding among crisis responders.

TRACK FORMAT

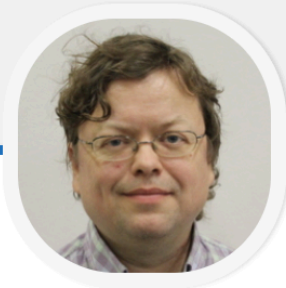
The format will be a “normal” paper presentation setup and a final broader discussion covering the way forward for the research area and for this special track.



TRACK TOPICS

- Universal design, usability and accessibility, with a special focus on elderly and people with disabilities.
- Personalised and adaptive ICT systems for elderly and people with disabilities
- ICT solutions for Inclusion and Diversity
- Universal Design of Crisis Visualization Tools and Technologies
- Universal Design of Emergency Response Tools and Technologies
- Universal Design of Information Crowdsourcing Tools and Technologies
- Universal Design of Emerging Technologies in Emergency Management
- Universal Design of Social Media for Emergency Interaction
- Universal Design of Crisis Map
- Universal Design of Emergency Alert Systems and Technologies
- Universal Design of Web-based Alert Systems
- Evaluation of Emergency Management Systems and Tools
- Evaluation of Mobile Device-based Emergency Management Systems
- Universal Design of Command and Control Room for Emergency Management
- Universal Design of Information Visualization for Crisis Responders
- User-centered Design of Emergency Management Tools and Technologies
- Assistive Technologies with ICT Tools in Emergency Management
- Interface design for ICT Tools in Emergency Management
- Technologies and Methodologies for Improving Accessibility of Crisis Terminologies
- Supporting Tools to Mitigate Language and Cultural Barriers in Emergency Management
- Situational Disability in Emergency Situations
- Integrated Research and Evaluation Methodologies for Usability of ICT Support for Emergency Management
- Emerging Technologies such as Augmented Reality for helping Elderly People and People with Disabilities

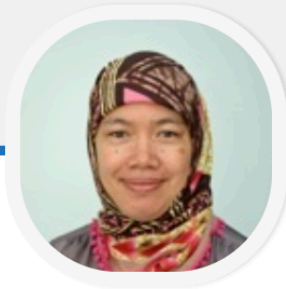
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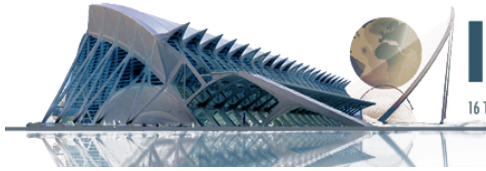
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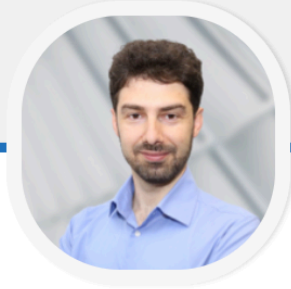
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ISCRAM 2019

16 TH INTERNATIONAL CONFERENCE ON INFORMATION SYSTEMS FOR CRISIS RESPONSE AND MANAGEMENT



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