



ISCRAM 2023

University of Nebraska at Omaha's College
of Information Science & Technology
Omaha, Nebraska, USA

TRACK: Enhancing Protection of Critical Infrastructures

20th International Conference on
INFORMATION SYSTEMS FOR CRISIS RESPONSE AND
MANAGEMENT

*Theme: "Building Humanitarian
Technologies for our Emerging Future +
Building Resilient Societies"*

Workshops and Doctoral Symposium May 27th, 2023

Conference May 28th-31th, 2023

Omaha, Nebraska - USA

The University of Nebraska at Omaha (UNO)

<https://iscram2023.net/>

INTRODUCTION TO THE TRACK

Critical infrastructures (CIs) are located at the heart of today's society and provide a multitude of vital services. This has become even more evident during the recent COVID pandemic and the crisis in the Ukraine, when disruptions and shortages in various sectors have highlighted the complex interdependencies among the CIs and the importance of international supply chains. Hence, the protection of CIs has developed into a multi-dimensional problem that requires consideration of a broad range of different views. When performing a thorough analysis, theoretical concepts and models are as important as domain-specific knowledge and expert opinions and

experience. Obtaining a systemic view on critical infrastructures, their upstream and downstream supply chains and their vulnerabilities has become a major goal in nowadays' risk, crisis and resilience management.




This track aims at bringing together existing and novel approaches and concepts, which can establish such a comprehensive view on CIs by identifying systemic vulnerabilities and risks, estimating consequences and simulating cascading effects as well as evaluating implications on CI resilience and mitigation strategies, on diverse levels including social, technical, economic and legal domains. The goal is to discuss tools and methodologies that can support CI operators and prepare them for future crisis situations. Therefore, this track targets researchers and practitioners focusing on (cyber-)security, risk and resilience modelling, incident response, human behavioral modeling as well as the real-life application of such methodologies.

TRACK TOPICS

Topics of interest include the following, but are not limited to:

- Assessment of systemic threats and risks in critical infrastructures and their supply chains on all relevant levels (social, legal, economic, etc.)
- Identification and estimation of cascading effects and their impacts on society
- Identification of optimal protection methods for critical infrastructures to reduce their risk and / or increase their resilience
- Incorporation of incident response & recovery methods
- Incorporation and evaluation of training mechanisms (e.g., serious games) to optimize mitigation activities for the protection of critical infrastructures and make mechanisms more sustainable
- Coordination between critical infrastructure operators and first responders in crisis situations
- Simulation of responses to incidents involving critical infrastructures
- Improvement of domain specific language / classification of incidents
- Examination of issues related to critical infrastructures that enhance their resilience during disasters
- Description and development of tools that enforce protection of CIs

TRACK CHAIR AND CO-CHAIR

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