

ISCRAM 



**20th Global Information Systems for Crisis Response
and Management Conference (ISCRAM 2023)
Omaha, Nebraska (USA)
May 28–31, 2023
<https://iscram2023.net>**

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

CONFERENCE PROGRAM



ISCRAM 2023

Department of Information Systems & Quantitative Analysis
University of Nebraska at Omaha (USA)

Welcome to ISCRAM 2023 and Omaha, Nebraska (USA)

Dear Colleagues:



We may not always agree on stock picks, but one thing we do agree on is that [Omaha](#) is a sure bet. We invite you to experience our city during the conference. Omaha is where Warren Buffett lives, Bill Gates eats, U2 sings, Indie Rock [Music](#) begins and ends, and the US President feels [protected](#). Omaha offers world-class attractions, including the recently ranked top zoo in United States, a groundbreaking cultural scene, and a lively entertainment district including Indy music. Nestled along the Missouri

River in the center of the United States, Omaha offers its own unique brand of adventure.

We are excited to celebrate the **20th anniversary of the Global ISCRAM Conference (Theme: Building Humanitarian Technologies for our Emerging Future + Building Resilient Societies)** with you. We have an outstanding conference program setup for you including 95 paper contributions (61 WiP & 27 CoRe papers; 7 posters/demonstrations), three interesting keynote speakers, two panels, three workshops/tutorials, a doctoral consortium, and three diverse but uniquely “best of Omaha” special events. We have nine amazing sponsors who have graciously helped support the conference and keep our registration rates at pre-Covid levels. Thanks to the Omaha’s Convention & Visitors Bureau we will also have a free pre-conference social/reception on 27th May evening.

These are exciting times in Omaha. We have a booming information technology (IT) sector, a rapidly expanding startup culture, growing corporate investment, outstanding industry and education partnerships, an emphasis on ICT facilitated Emergency Response, not to mention the highest number of public golf courses of any city in the country. For us, [Omaha](#) is truly a city that provides the best of what big and small cities have to offer. We hope you join us in enjoying everything Omaha has to offer!

No conference is complete without the enormous and at times thankless contributions of the numerous volunteers on the ground, the conference committee members, track chairs and their teams, and many reviewers who help make ISCRAM a success each year. Our heartfelt gratitude to everyone.

Hope you enjoy the conference and of course Omaha!

Your ISCRAM 2023 Program Chairs

Ioannis Dokas, Nick LaLone and Jaziar Radianti (Program Chairs)
Deepak Khazanchi (General Chair)



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PRE-CONFERENCE ACTIVITIES

Saturday, May 27th, 2023

Pre-Conference Social: 5:30 pm to 8:00 pm

Location: Embassy Suites Courtyard

Agenda: Networking and Conference Welcome

The social is sponsored by the [Greater Omaha Convention and Visitors Bureau](#).

Access to a bar and heavy hors d'oeuvres will be offered.

Sunday, May 28th, 2023

Doctoral Consortium: 8:30 am to 1:30pm

Session Chairs: Zeno Franco and Amanda Lee Hughes

Location: Embassy Suites Board Room

Pre-Conference Workshops and Demonstrations: (Signup for a workshop [here](#)).

Session Chairs: Terje Gjørseter, Dave Parry, and Mihoko Sakurai

Time	Location	Workshop/Tutorial/Demonstration	Led by:
10:00 to 13:00	Big Blue A	Workshop#1: The Secret Sauce of Effective Emergency Management: Uncovering the Characteristics of Information Trading Zones	Kjetil Rustenberg and Terje Gjørseter
10:00 to 12:30	Big Blue B	Workshop#2: Crisis Management, Health, and Emergency Living-labs	Caroline Rizza and Ophélie Morand
10:00 to 15:30	Big Blue C	Workshop#3: Devising assessment and mitigation of systemic risks with strategy mapping with a participant group	Jose J. Gonzalez and Anton Björnqvist

Welcome Reception: 5:30 pm – 9:30 pm

Location: [Henry Doorly Zoo & Aquarium \(ZOO MAP\)](#)

NB: Access to the Zoo with ISCRAM2023 name tag only. Guests of delegates must register for a special event ticket on the ISCRAM2023 website.

Bus shuttles will be provided from the Anchor Hotel starting at 2:30pm. Delegates are invited to enjoy the Omaha zoo (now ranked number one in the USA) till **5:30pm** when we request that everyone gather at the **TreeTops Restaurant** (near the entrance) for the welcome reception (networking social and food).

AGENDA: Conference kick-off; Welcome to Conference from ISCRAM 2023 Committee and ISCRAM President and Board members.



CONFERENCE SCHEDULE

Time allotted: WiPe (20 mins including Q&A). CoRe (25 min including Q &A)

Day 1: Monday, May 29th, 2023		
<i>Time</i>	<i>Location</i>	<i>Event</i>
6:30-8:00		Breakfast (Anchor hotel residents – breakfast included in your cost)
8:30-17:00		Sponsor Exhibits
8:45-9:15	Missouri/Platte	Announcements; Conference Welcome
9:15-10:00	Riverfront Ballroom	Keynote address: Dr. Ilkay Altıntaş , Chief Data Science Officer, University of California San Diego Supercomputer Center <i>Partnerships for Innovation in Wildland Fire Science and Management</i>
10:00-10:15	Riverfront Hallway	Coffee Break + Exhibits
10:15-11:45		Session 1
		Session 1.1
		Session Chair: Terje Gjørseter
		Track 01 (CoRe): Rural Communication in Outage Scenarios: Disruption-Tolerant Networking via LoRaWAN Setups (Franz Kuntke, Lars Baumgärtner and Christian Reuter)
		Track 01 (CoRe): Co-Design Disaster Management Chatbot with Indigenous Communities (Chun-Hua Tsai, Paul Rayi, Sathvik Kadire, Yi-Fan Wang, Sarah Krafka, Edouardo Zendejas and Yu-Che Chen)
		Track 01 (WiPe): Towards a co-created Emergency Management Collaboration Repository (Kristine Steen-Tveit, Mikael Holmesland Snarud, Jan Egil Heinecke and Nora Fure)
		Track 01 (WiPe): Using Design Research to Explore Affordances for Collaboration in Crisis: Lessons from the Finnish Context (Minttu Tikka, Rahim Ahsanullah, Uttishta Varanasi, Vuokko Härmä, Nitin Sawhney and Teemu Leinonen)
		Session 1.2
		Session Chair: Rob Grace
		Track 02 (WiPe): The Impact of conflicts on Data Sharing for Disaster Risk Reduction (Anouck Adrot and Aguerre Mercedes)
	Big Blue A	
	Big Blue B	



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		<p>Track 02 (WiPe): Decision Support in uncertain context: Physics of Decision and Virtual Reality (Frédéric Bénaben, Audrey Fertier, Thibaut Cerabona, Nafe Moradkhani, Matthieu Lauras and Benoit Montreuil)</p> <p>Track 02 (WiPe): Is this a date? - New perspectives on ICT for inter-organizational crisis management (Jonas Herkevall and Björn Johansson)</p> <p>Track 02 (WiPe): Towards efficient Post-Blackout Emergency Communication based on Citizens' Smartphone State of Charge (Eridy Lukau, Jochen Schiller and Ulrich Meissen)</p>
	Big Blue C	<p style="text-align: center;">Session 1.3</p> <p>Session Chair: Tiina Ristmäe</p> <p>Track 04 (CoRe): Local Disaster Mitigation Technology with Travel Support Application (Toshihiro Osaragi, Takashi Suematsu, Takuya Oki and Akira Kakizaki)</p> <p>Track 04 (WiPe): Coordination of Drones Swarm for Wildfires Monitoring (Ján Zelenka, Tomáš Kasanický, Zoltán Balogh, Emil Gatial, Simona Kalinovská, Richard Rehák, Andrea Majlingová, Yvonne Brodrechtová, Yann Semet and Gregoire Boussu)</p> <p>Track 04 (WiPe): Communication Protocol using Nontraditional Information Sources between First Responders and Citizens during Wildfires (Zoltan Balogh, Emil Gatial, Sepideh Hassankhani-Dolatabadi, Štefan Dlugolinský, Marco Saltarella, Dominika Grunwald, Marcello Paolo Scipioni, Marcin Przybyszewski, Andrea Majlingova, Yvonne Brodrechtova, Kayvan Yousefi Mojir, Nasrine Olson, Jelena Levak and Krishna Chandramouli)</p> <p>Track 17 (CoRe): Improving resilience against a pandemic: A novel technology for strategy development with practitioners and decision-makers (Eirik Abildsnes, Sigurd Paulsen and Jose J. Gonzalez)</p>
10:15-11:45	Riverfront Hallway	Coffee Break + Exhibits



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<i>Time</i>	<i>Location</i>	<i>Event</i>
12:00-12:45		PANEL DISCUSSION
	Missouri/Platte	<p><i>Improving Visibility for Proactive Tactics in Emerging Situations</i></p> <ul style="list-style-type: none"> • Lindsay Huse, Health Director, Douglas County Health Department, Nebraska • Michelle (Shelly) Schwedhelm, Associate Director of Global Center for Health Security, University of Nebraska Medical Center • Heidi Steinecker, EY US Public Health Government Executive Lead, former CA Dept of Public Health <p>Panel Facilitator: Deepak Khazanchi</p>
12:45-13:45	Atrium	Networking Lunch
13:45-15:15		Session 2
	Big Blue A	<p>Session 2.1</p> <p>Session Chair: Tiina Ristmäe</p> <p>Track 04 (WiPe): Real-time Multi-Sensor Positioning for First Responders (Gustav Tolt, Joakim Rydell, Erika Bilock, Jacob Eek, Peter Andersson and Jonas Nygårds)</p> <p>Track 04 (WiPe): Automatic Speech Translation for Multinational First Responder Teams (Guillermo Cámbara, Jens Grivolla, Mireia Farrús and Leo Wanner)</p> <p>Track 04 (WiPe): Acceptance study on application systems to improve situational incident management through bi-directional communication between citizens and decision-makers in emergencies and crises situations (Michael Holzhüter, Günter Huhle, Melanie Reuter-Oppermann, Janine Hellriegel and Michael Klafft)</p> <p>Track 04 (WiPe): KENNEL Threat Detection Boxes for First Responder Situational Awareness and Risk Management (Matthew Paulini, Daniel Duran, Mary Rice, Alex Andrekanic and Nirranjan Suri)</p>



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	Big Blue B	<p style="text-align: center;">Session 2.2</p> <p>Session Chair: Reem Abbas</p> <p>Track 05 (WiPe): Visualizing the Psychosocial Situation in Crises and Disasters: Conceptualizing a Multi-Functional Crisis Information Platform (CIP-PS) (Sebastian Sterl, Andreas Billig, Franck William Taffo and Lars Gerhold)</p> <p>Track 05 (WiPe): Generating Personalized Pregnancy Nutrition Recommendations with GPT-Powered AI Chatbot (Chun-Hua Tsai, Sathvik Kadire, Tejesvi Sreeramdas, Matthew Vanormer, Melissa Thoene, Corrine Hanson, Ann Anderson Berry and Deepak Khazanchi)</p> <p>Track 05 (WiPe): Customizing the BattlePeer App: Connecting First Responders with Peer Support to Manage Mental Health Crises (Zeno Franco, Natalie Baker, Temitayo Okusanya, Md Romael Haque, Jane Gresser, Sabirat Rubya, Praveen Madiraju, Jason Curry, Otis Winstead, Katinka Hooyer, Robert Curry, Chris Medlock and Daniel Medlock)</p> <p>Track 05 (WiPe): Conceptualizing a Pandemic Early Warning System Using Various Data: An Integrative Approach (Sebastian Sterl, Nirmin Almalla and Lars Gerhold)</p>
	Big Blue C	<p style="text-align: center;">Session 2.3</p> <p>Session Chair: Amanda Lee Hughes and/or Cody Buntain</p> <p>Track 06 (WiPe): Semi-Supervised Few-Shot Learning for Fine-grained Disaster Tweet Classification (Henry Zou, Cornelia Caragea, Yue Zhou and Doina Caragea)</p> <p>Track 06 (WiPe): Real-time Remote Social Sensing via Targeted Advertising (Masoomali Fatehkia, Muhammad Imran and Ingmar Weber)</p> <p>Track 06 (WiPe): TweEvent: A dataset of Twitter messages about events in the Ukraine conflict (Samyo Rode-Hasinger, Matthias Häberle, Daniel Racek, Anna Kruspe and Xiao Xiang Zhu)</p> <p>Track 06 (WiPe): Factors Affecting Public's Engagement with Tweets by Authoritative Sources in Crisis (Sara Nurollahian, Isha Talegaonkar, Anna Bell and Marina Kogan)</p>



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<i>Time</i>	<i>Location</i>	<i>Event</i>
15:15-15:45	Riverfront Hallway	Coffee Break + Exhibits
15:45-17:00		Session 3
	Big Blue A	<p align="center">Session 3.1</p> <p>Session Chair: Filippo Sanfilippo</p> <p>Track 09 (WiPe): Challenges in work procedures in distributed crisis management (Erik A.M. Borglund and Martina Granholm)</p> <p>Track 11 (WiPe): Adaptive Execution of Workflows in Emergency Response (Massimo Cossentino, Luca Sabatucci, Salvatore Lopes and Davide Andrea Guastella)</p> <p>Track 14 (CoRe): Mimicking the Sense of Smell of Search and Rescue (SAR) Dogs: a Bio-inspired Steering Framework for Quadruped Robots (Filippo Sanfilippo and Ignacio Raño)</p> <p>Track 14 (CoRe): COBOT Safety Awareness: A RealTSL Demonstration in a Simulated System (Apostolos Zeleskidis, Stavroula Charalampidou, Ioannis M. Dokas and Frantsi Torra)</p>
	Big Blue B	<p align="center">Session 3.2</p> <p>Session Chair: Chris Zobel</p> <p>Track 07 (WiPe): Towards the Design of a Simulation-based Decision Support System for Mass-Casualty Incidents (Florentina Hager, Melanie Reuter-Oppermann, Tim Müller and Sadeeb Ottenburger)</p> <p>Track 07 (CoRe): Civil-Military Interaction: a case study to validate a conceptual framework (Dick Ooms) - BEST STUDENT PAPER FINALIST</p> <p>Track 07 (WiPe): SimulationOps - Towards a Simulation-as-a-Service Platform for Resilient Societies Using a Cross-domain Data Mesh (Hannes Restel)</p> <p>Track 07 (CoRe): Using system dynamics to simulate trust in digital supply chains (Mari Aarland, Jaziar Radianti and Terje Gjørseter)</p>



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	Big Blue C	<p style="text-align: center;">Session 3.3</p> <p>Session Chair: Hemant Purohit</p> <p>Track 16 (CoRe): Localization of Events Using Neural Networks in Twitter Data (Usman Anjum, Vladimir Zadorozhny and Prashant Krishnamurthy)</p> <p>Track 16 (WiPe): A Topic Modeling Approach for Extracting Key City Resilience Indicators (Blanca López-Catalán and Victor Bañuls)</p> <p>Track 16 (WiPe): A Human-Centric Evaluation Dataset for Automated Early Wildfire Detection From a Causal Perspective (Amelie Schmidt-Colberg and Leonhard Löffler-Dauth)</p> <p>Track 16 (WiPe): Identifying COVID-19 Low-Income Households Related Tweets with Semi-Supervised Approaches (Hongmin Li, Doina Caragea, Akash Mhatre, Muyi Liu and Jianye Ge)</p>
17:30	Special Event	<p>Upstream Brewing Company (Microbrewery + Food)</p> <p>Walking Directions from Anchor Hotel (5 minute walk; ISCRAM2023 volunteers will be at the anchor hotel to lead groups to the event)</p>



CONFERENCE SCHEDULE

Time allotted: WiPe (20 mins including Q&A). CoRe (25 min including Q &A)

Day 2: Tuesday, May 30, 2023		
<i>Time</i>	<i>Location</i>	<i>Event</i>
6:30-8:00		Breakfast (Anchor hotel residents – breakfast included in your cost)
8:30-17:00		Sponsor Exhibits
8:45-9:00	Missouri/Platte	Announcements
9:00–9:45	Missouri/Platte	Keynote address: Dr. Daniel Elliott, Manager Data Services, Lindsay Corporation <i>Mechanized Irrigation Technology for Climate Smart Systems</i>
9:45-10:00	Riverfront Hallway	Coffee Break + Exhibits
10:00-11:30		Session 1
		Session 1.1: REMOTE PRESENTATIONS
		Session Chair: Cody Buntain
		Track 06 (WiPe): An Early Synthesis of Deep Neural Networks to Identify Multimodal Informative Disaster Tweets (Fareen Tasneem, Shima Chakraborty and Abu Nowshed Chy)
		Track 06 (CoRe): Examining the influence of social media on individual’s protective action taking during Covid-19 (Xiaodan Yu, Jiaying Chen and Jiaqi Liu)
		Track 06 (CoRe): Crisis Event Social Media Summarization with GPT-3 and Neural Reranking (Jayr Pereira, Robson Fidalgo, Roberto Lotufo and Rodrigo Nogueira)
		Track 04 (WiPe): Increasing diver safety for heavy underwater works by Sonar-to-Video Image Translation (Jan Lorscheidt, Bilal Wehbe, Diego Cesar, Tom Becker and Thomas Vögele)
		Session 1.2
		Session Chair: Chris Zobel
		Track 07 (CoRe): Towards a risk analysis method for systems of systems-A case study on wildfire rescue operations (Marjorie Nawila Pettersson, Jakob Axelsson, Pontus Svenson and Ann Johansson)
	Big Blue A	
	Big Blue B	



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		<p>Track 07 (CoRe): Evaluation of Improvement Projects in Densely Built-Up Area using a Large Earthquake Disaster Simulator: A case study in Kyojima Area, Tokyo (Maki Kishimoto, Toshihiro Osaragi and Yili Chan)</p> <p>Track 07 (WiPe): An Updated System Dynamics Model for Analysing the Cascading Effects of Critical Infrastructure Failures (Ahmed Abdelgawad)</p> <p>Track 07 (WiPe): Navigating Towards Safe and Secure Offshore Wind Farms: An Indicator-Based Approach in the German North and Baltic Sea (Alexander Gabriel and Frank Sill Torres)</p>
	Big Blue C	<p style="text-align: center;">Session 1.3</p> <p>Session Chair: Hemant Purohit</p> <p>Track 01 (WiPe): Practitioner Perspectives of the PROACTIVE CBRNe Disaster App (Laura Petersen, Grigore M. Havarneanu, Natasha McCrone and Garegin Markarian)</p> <p>Track 06 (CoRe): CrisisViT: A Robust Vision Transformer for Crisis Image Classification (Zijun Long, Richard Mccreadie and Muhammad Imran)</p> <p>Track 16 (CoRe): A Comparative Study of Pre-trained Language Models to Filter Informative Code-mixed Data on Social Media during Disasters (Hossein Salemi, Yasas Senarath and Hemant Purohit)</p> <p>Track 16 (WiPe): Identifying COVID-19 Low-Income Households Related Tweets with Semi-Supervised Approaches (Hongmin Li, Doina Caragea, Akash Mhatre, Muyi Liu and Jianye Ge)</p>
	Missouri/Platte	<p style="text-align: center;">Session 1.4</p> <p>Session Chair: Amanda Lee Hughes</p> <p>Track 06 (CoRe): A Twitter narrative of the COVID-19 pandemic in Australia (Rabindra Lamsal, Maria Rodriguez Read and Shanika Karunasekera)</p> <p>Track 06 (WiPe): Leveraging Crisis Informatics Experts: A co-creating approach for validation of social media research insights (Lucia Castro Herrera and Terje Gjøsæter)</p>



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		<p>Track 06 (WiPe): Use of Statistics in Disaster by Local Individuals: An Examination of Tweets during COVID-19 (Lise St Denis and Amanda Hughes)</p> <p>Track 06 (CoRe): The Role of Expressed Emotions on the Retransmission of Help-Seeking Messages during Disasters (Trilce Encarnacion and Chelsey Wilks)</p>
11:30-11:45	Riverfront Hallway	Coffee Break + Exhibits
11:45-12:30		PANEL DISCUSSION
	Missouri/Platte	<p><i>From Resilient Critical Infrastructures to a Resilient Society</i></p> <ul style="list-style-type: none"> • Rob Grace, Assistant Professor, Texas Tech University; VP of ISCRAM • Laura Peterson, Senior Security Research Advisor, Covid19 Task Force, International Union of Railways • Milad Roohi, Assistant Professor of Civil & Environmental Engineering, Director Smart Resilient Infrastructure and Urban Systems (SiRIUS) lab, University of Nebraska Lincoln • Stefan Schauer, Senior Scientist, Security & Communication Technologies, Center for Digital Safety & Security
12:30-13:30	Atrium Missouri/Platte	Networking Lunch and Practitioner Keynote: Craig Bell, Director, Center of Excellence, Valmont Industries Inc.
13:30-15:00		Session 2
	Big Blue A	<p>Session 2.1</p> <p>Session Chair: Stefan Schauer</p> <p>Track 03 (WiPe): Cross-border Digital Platform for Transport Critical Infrastructure Resilience: Functionalities and Use-case (Boris Petrenj, Mariachiara Piraina, Fabio Borghetti, Giovanna Marchionni and Valentina Urbano)</p> <p>Track 03 (WiPe): Critical infrastructure and crisis-affected actor? Investigating the double role of municipal administrations (Malte Schönefeld, Patricia M. Schütte, Yannic Schulte and Frank Fiedrich)</p> <p>Track 15 (WiPe): Using Cybersecurity Testbeds to Evaluate (In)Secure Structural Health Monitoring Systems (Ali Al Harrasi, George Grispos and Robin Gandhi)</p>



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<i>Time</i>	<i>Location</i>	<i>Event</i>
	Big Blue B	<p align="center">Session 2.2</p> <p>Session Chair: Tiina Ristmäe</p> <p>Track 04 (WiPe): The MAX Drone for Autonomous Indoor Exploration (Gustav Tolt, Joakim Rydell, Michael Tulldahl, Max Holmberg, Oskar Karlsson and Fredrik Bissmarck)</p> <p>Track 04 (WiPe): Object detection and augmented reality annotations for increased situational awareness in light smoke conditions (Ioanna Gkika, Dimitrios Pattas, Konstantinos Konstantoudakis and Dimitrios Zarpalas)</p> <p>Track 04 (CoRe): The Crisis of Designing for Disaster: How to Help Emergency Management During the Technology Crisis We Created (Nicolas LaLone, Phoebe O Dugas Troups and Bryan Semaan)</p> <p>Track 04 (WiPe): Self-Localization: A proposal to equip first responders with a robust and accurate GNSS device (Dennis Dahlke, Susanna Kaiser and Steven Bayer)</p>
	Big Blue C	<p align="center">Session 2.3</p> <p>Session Chair: Björn Johansson</p> <p>Track 09 (WiPe): Identifying Teamwork Processes in a Medical Command and Control Team During the COVID-19 Pandemic (Anton Björnqvist, Wilhelm Brodin, Marc Friberg and Peter Berggren)</p> <p>Track 09 (CoRe): Collaborative Information Seeking during a 911 Call Surge: A Case Study (Rob Grace, Aurélie Montarnal, Eva Petitdemange, Juliette Rutter, Guillermo Romera Rodriguez and Michelle Potts) – BEST PAPER FINALIST</p> <p>Track 09 (WiPe): Supporting Instructors in Conducting Exercises (Alva Lindhagen, Anton Björnqvist and Peter Berggren)</p> <p>Track 09 (CoRe): Enhancing Learning from Incidents by Reconstruction of Events: Using the SQUARE Tool for Evaluation (Jaziar Radianti, Sofie Pilemalm, Kristine Steen-Tveit and Kjetil Rustenberg)</p>



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<i>Time</i>	<i>Location</i>	<i>Event</i>
	Missouri/Platte	<p align="center">Session 2.4</p> <p>Session Chair: Brian Ricks and Selby Knudsen</p> <p>Track 08 (CoRe): Contact Tracing Mobile Applications in New York: A Qualitative Study on the Use and Privacy Perceptions (Deedee Bennett Gayle, Xiaojun Yuan, Yvonne Dadson and Natasha Edwards) - BEST PAPER FINALIST</p> <p>Track 13 (WiPe): ROBUST communication platform – A decentralized, distributed communication platform for the earthquake early warning system ROBUST (Michael Jendreck, Janine Hellriegel, Jonas Allmann, Stefan Pfennigschmidt, Ulrich Meissen and Frank Fuchs-Kittowski)</p> <p>Track 13 (WiPe): Towards Interactive Visualizations for Explaining Machine Learning Models (Ashley Ramsey, Brian Ricks, Yonas Kassa, Akshay Kale and Robin Gandhi)</p> <p>Track 13 (WiPe): EMA-based monitoring method of strengthened Beam-Column Joints (Constantin Chalioris, Nikos Papadopoulos, George Sapidis, Maria Naoun and Emmanouil Golias)</p>
15:00-15:45	<p align="center">Riverfront Hallway</p> <p align="center">Coffee Break</p>	<p align="center">POSTERS and DEMONSTRATIONS</p> <p>Session Chair: Apoorva Chauhan</p> <p>Designing collaborative emergency plans for enhancing resilience in urban business parks (Renan Rodriguez and Victor Bañuls)</p> <p>Pandemic crisis management: The EU project STAMINA (Jernej Završnik, Helena Blažun Vošner and Peter Kokol)</p> <p>DIMEPRO: a tool for diagnosis and improvement of the self-protection plans management (M^a Carmen Penadés, Ana G. Nuñez, José H. Canós and Javier Coronel)</p> <p>Crowdsourcing and collaboration for crisis communication: a systematic review (Maria Clara Pestana, Vaninha Vieira and Ailton Ribeiro)</p> <p>Investigating the Role of Digital Divide and Social Media Use to Improve Disaster Resilience in Vulnerable Communities (Thiagarajan Ramakrishnan and Lei Zou)</p> <p>Social Media Use for Disaster Management by Underserved Communities: A Uses and Gratification Theory Perspective (Shahedur Rahman, Thiagarajan Ramakrishnan and Louis Ngamassi)</p>



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Day 2: Tuesday, May 30, 2023		
<i>Time</i>	<i>Location</i>	<i>Event</i>
		Tackling Non-transparency - Identification of Hidden Problems in Component-Based Supply Chains (Sabine Janzen, Sebastian Baer, Agbodzea Pascal Ahiagble and Wolfgang Maass)
15:45-17:15		ISCRAM GENERAL ASSEMBLY
18:00 onwards	Closing Gala	Strategic Air Command and Aerospace Museum Buses will depart from Anchor Hotel at 17:30 (5:30pm) sharp (Self-driving Directions)



CONFERENCE SCHEDULE

Time allotted: WiPe (20 mins including Q&A). CoRe (25 min including Q &A)

Day 3: Wednesday, May 31, 2023		
<i>Time</i>	<i>Location</i>	<i>Event</i>
6:30-8:00		Breakfast (Anchor hotel residents – breakfast included in your cost)
8:30-12:00		Sponsor Exhibits
8:45-9:00	Missouri/Platte	Announcements
9:00–9:45	Missouri/Platte	<p>Keynote address: Dr. Pia-Johanna Schweizer, Research Group Leader "Systemic Risks", Research Institute for Sustainability – Helmholtz Centre Potsdam, Potsdam, Germany.</p> <p><i>Systemic Risk - Information, Knowledge, Governance</i></p>
9:45-10:00	Riverfront Hallway	Coffee Break + Exhibits
10:00-11:30		Session 1
		Session 1.1
		<p>Session Chair: Nicolas Lalone</p> <p>Track 18 (WiPe): Active shooter events: A research initiation (Erik A.M. Borglund and Jonas Hansson)</p> <p>Track 18 (CoRe): Flying SD Cards, Aerial Repeaters, & Homebrew Mobile Apps: Emergent Use of Technologies for Collaboration in Search and Rescue (Nicolas Lalone, Jared Van Natta, Michelle Cormier, Marlina Fraune, Bill Hamilton, Phoebe O Dugas Touns, Sultan Alharthi and Mahlet Zemedie)</p> <p>Track 18 (WiPe): Towards a Generic Metamodel for Urban Resilience Assessment (Jose A. Carsí, Jose H. Canós-Cerdá, M^a Carmen Penadés, Juan Sanchez-Díaz and Marcos Borges)</p>
	Big Blue A	
		Session 1.2
		<p>Session Chair: Michael A. Erskine</p> <p>Track 12 (WiPe): Revealing social disparities under natural disasters using large-scale mobility data: A dynamic accessibility perspective (Ruoxi Wang and Nan Li)</p>
	Big Blue B	



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Day 3: Wednesday, May 31, 2023

<i>Time</i>	<i>Location</i>	<i>Event</i>
		<p>Track 12 (WiPe): An innovative scenario-based modeling tool for the management of resilient water resources (Abla Edjossan-Sossou, Mohamed Ouabou, Mario Al Sayah, Camille Vignote and Karim Selouane)</p> <p>Track 18 (CoRe): Devising Mitigation Strategies with Stakeholders Against Systemic Risks in a Pandemic (Jose J. Gonzalez and Colin Eden)</p>
	Big Blue C	<p style="text-align: center;">Session 1.3</p> <p>Session Chair: Björn Johansson</p> <p>Track 09 (CoRe): Exploring Demons for the Establishment of Team Situational Awareness (Kjetil Rustenberg, Jaziar Radianti and Terje Gjøsæter)</p> <p>Track 09 (WiPe): Methods to meet changes in the security environment a proposal of qualitative and quantitative assessment attributes for coordination performance (Rune Stensrud and Sigmund Valaker)</p> <p>Track 09 (WiPe): Design of a Systems Theory Approach for the Evaluation of C2-Systems (Lennart Landsberg and Ompe Aimé Mudimu)</p> <p>Track 09 (WiPe): Building capacity – conceptualizing Training of Trainers (Peter Berggren, Björn Johansson, Tobias Ryrberg and Alva Lindhagen)</p>
11:30-11:45	Riverfront Hallway	Coffee Break
11:45-13:15		Session 2
	Big Blue A	<p style="text-align: center;">Session 2.1</p> <p>Session Chair: Nick Lalone</p> <p>Track 18 (WiPe): Aphorme: An Intralingual Translation Tool for Emergency Management and Disaster Response (Meghan Dunn)</p> <p>Track 18 (WiPe): Prioritization of disaster-related requests in an IT-enabled public service system (Duygu Pamukcu, Christopher Zobel and Yue Ge)</p>



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Day 3: Wednesday, May 31, 2023

<i>Time</i>	<i>Location</i>	<i>Event</i>
		<p>Track 18 (CoRe): Evaluation-driven Disaster Management Exercises: A Collaborative Toolkit (Sebastian Henke, Adam Widera and Bernd Hellingrath) - BEST STUDENT PAPER FINALIST</p> <p>Track 18 (WiPe): How Would Emergency Communication Based on LoRaWAN Perform? Empirical Findings of Signal Propagation in Rural Areas (Franz Kuntke, Merve Bektas, Laura Buhleier, Ella Pohl, Rebekka Schiller and Christian Reuter)</p>
	Big Blue B	<p style="text-align: center;">Session 2.2</p> <p>Session Chair: Amanda Lee Hughes</p> <p>Track 06 (WiPe): Towards XAI for Information Extraction on Online Media Data for Disaster Risk Management (Jane Arleth Dela Cruz, Iris Hendrickx and Martha Larson)</p> <p>Track 06 (WiPe): Resonance+: Augmenting Collective Attention to Find Information on Public Cognition and Perception of Risk (Di Wang and Marina Kogan)</p> <p>Track 06 (WiPe): Humor-Based COVID-19 Twitter Accounts (Apoorva Chauhan)</p> <p>Track 06 (CoRe): CrisisFACTs: Building and Evaluating Crisis Timelines (Richard McCreddie and Cody Buntain)</p>
	Big Blue C	<p style="text-align: center;">Session 2.3</p> <p>Session Chair(s): Sofie Pilemalm and/or Ophélie Morand</p> <p>Track 10 (WiPe): Towards a Taxonomy for Classification of Coordination Systems for Spontaneous Volunteers (Hans Betke, Michaëlle Bosse, Stefan Sackmann and Christian Reusch)</p> <p>Track 10 (WiPe): Citizen Engagement in wildfire management: needs, challenges, methods and framework (Kayvan Yousefi Mojir, Elena Maceviciute, Nasrine Olson, Zoltan Balogh and Emil Gatjal)</p> <p>Track 10 (CoRe): Digitalized Co-production and Volunteerism in Emergency Response: A Literature Review (Wael Alkusaibati and Sofie Pilemalm)</p>



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<i>Time</i>	<i>Location</i>	<i>Event</i>
		Track 10 (WiPe): Using photography as a trace of activity to facilitate the retention of emergency response actions (Ophélie Morand, Robert Larribau, Stéphane Safin, Hortense Soichet and Caroline Rizza)
13:15-14:00	Courtyard	Boxed lunch
14:00		Adjournment

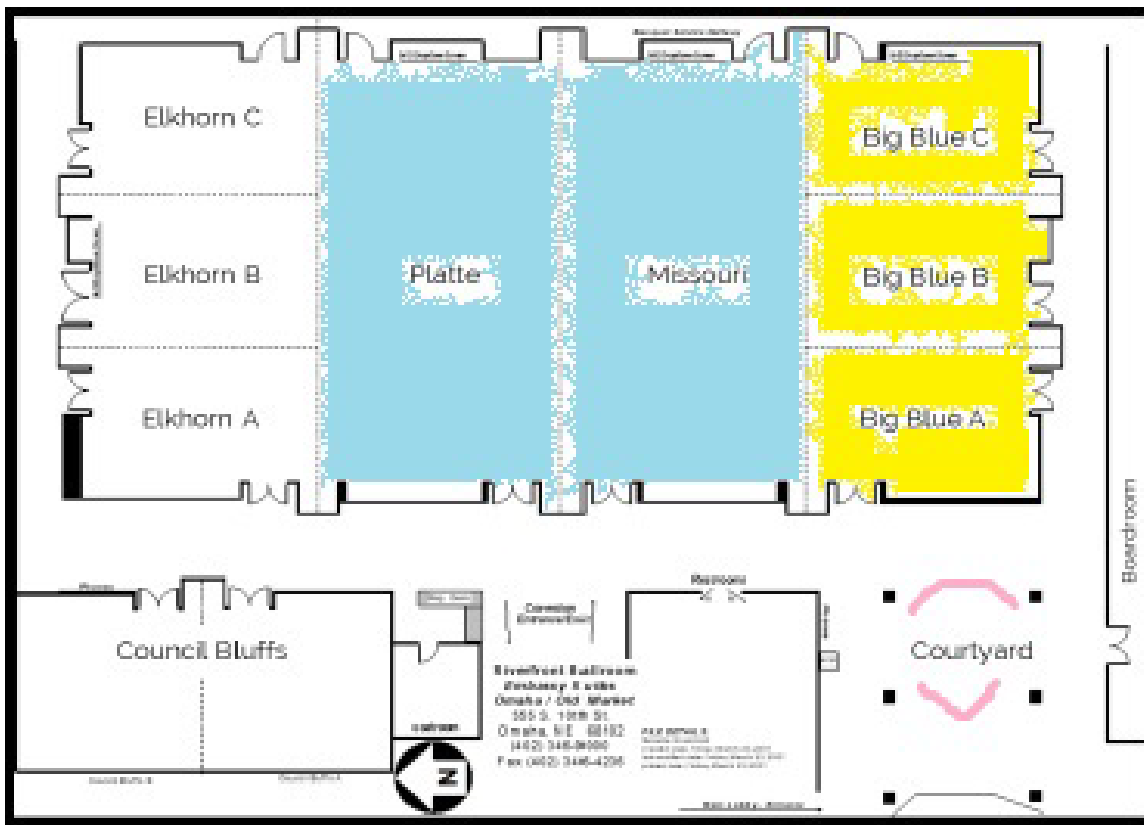


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ISCRAM GLOBAL SCHEDULE & ROOM LAYOUT

ISCRAM 2023 @ OMAHA: GLOBAL SCHEDULE																	
NB: All Spaces listed in Row 6 refer to the Conference Anchor Hotel (Embassy Suites Omaha Downtown)																	
Pre-Conference Activities		Day 1 (Monday May 29th, 2023)					Day 2 (Tuesday May 30th, 2023)					Day 3 (Wednesday May 31st, 2023)					
May 27th, 2023	May 28th, 2023	Missouri/Platte	Big Blue A	Big Blue B	Big Blue C	Missouri/Platte	Missouri/Platte	Big Blue A	Big Blue B	Big Blue C	Missouri/Platte	Missouri/Platte	Big Blue A	Big Blue B	Big Blue C	Missouri/Platte	
08:45-09:00	Courtyard	Missouri/Platte Announcements					Missouri/Platte Announcements					Missouri/Platte Announcements					
09:00-09:15		Conference Welcome					Keynote Address					Keynote Address					
09:15-09:30		Keynote Address															
09:30-09:45																	
09:45-10:00																	
10:00-10:15																	
10:15-10:30	WORSHOPS & TUTORIALS (3 parallel sessions)																
10:30-10:45																	
10:45-11:00			PARALEL SESSION 1 4 papers	PARALEL SESSION 1 4 papers	PARALEL SESSION 1 4 papers	PARALEL SESSION 1 4 papers		PARALEL SESSION 1 4 papers	PARALEL SESSION 1 4 papers	PARALEL SESSION 1 4 papers	PARALEL SESSION 1 4 papers		PARALEL SESSION 1 4 papers	PARALEL SESSION 1 4 papers	PARALEL SESSION 1 4 papers	PARALEL SESSION 1 4 papers	
11:00-11:15																	
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16:45-17:00																	
17:00-17:15																	
17:30-21:00	Pre-Conference Social	Welcome Reception @ Henry Doorly Zoo	Special Event: Social at Upstream Brewery				Closing Gala @ SAC Museum										





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