

ISCRAM2009 PRELIMINARY PROGRAM

Sunday 10th to Wednesday 13th of May, Gothenburg, Sweden.

Conference and Program Chairs: Jonas Landgren, Bartel Van de Walle & Susanne Jul
Local organizing chair: Urban Nulden

ISCRAM 2009 is organized by University of Gothenburg & the Viktoria Institute
in collaboration with FOI, Lindköpings University and Lindholmen Science Park.

Conference Venue: University of Gothenburg: School of Business Economics and Law

SUNDAY 10th: PRE-CONFERENCE EVENTS

Location: IT-University, Forskningsgången 6, Lindholmen

09:00 - 16:30 PhD-Colloquium

Colloquium Committe: David Mendonca, New Jersey Institute of Technology, Julie Dugdale,
Laboratoire d'Informatique de Grenoble

12:00 - 14:00 Utilizing Crisis Management Exercises as research instrument

Organizer: Dr. Joeri van Laere, University of Skovde, Sweden

14:00 - 16:00 Workshop on Social Media for crisis response

Coodinators: Susanne Jul & Jonas Landgren

16:30 - 17:30 Student Poster Session

Organizer: Willem Muhren, Tilburg University

Mobile Information Technology for Emergency Response Workshop

Organizer: Markus Klann & Jobst Löffler

Sahana Open Source Workshop

Organizer: Bartel Van de Walle & Ingo Simonis

19:00 - (until late) Belgian Beer Evening and informal get-together

Location: Scandic Hotel Rubinen Avenyn

MONDAY 11th: CONFERENCE DAY 1

Location: University of Gothenburg, School of Business, Economics & Law, Vasagatan 1, Gothenburg

08:45 Plenary

Opening of the 2009 ISCRAM Conference

Keynote presentation: Lars Hedström

Room: Malmstensalen

10:00 COFFEE BREAK

10:30 PARALLEL SESSIONS

Human-Computer Interaction

Information Overload and Inclusivity

156	Using Text Analysis for Information Overload in Pan Flu Planning and Response	Collins, Linn Marks Blake, Miriam Hoare, Geoffrey Mane, Ketan K. Martinez, Mark L.B. Pittman, Jack Powell, James E. Roman, Jorge H. Spearing, Shelly White, Rhonda Yao, Xiang	Los Alamos National Laboratory, United States of America; Florida Department of Health, United States of America
219	Sensemaking and Information Management in Humanitarian Disaster Response: Observations from the TRIPLEX Exercise	Muhren, Willem Van de Walle, Bartel	Tilburg University, The Netherlands
246	Identifying and confirming information and system quality requirements for multi-agency disaster management	Bharosa, Nitesh Appelman, Jacco van Zanten, Bart Zuurmond, Arre	Delft University of Technology, The Netherlands

Humanitarian Actions and Operations

Approaches to Information Management

117	Building a humanitarian information system: the experience of the Dynamic COMPAS software	Sarrat, Olivier	Groupe URD, France
194	Information Management and Technology Issues Addressed by Humanitarian Relief Coordination Bodies	Maitland, Carleen F. Ngamassi Tchouakeu, Louis-Marie Tapia, Andrea H.	Penn State University, United States of America
227	An optimization model for humanitarian relief volunteer management	Falasca, Mauro Fetter, Gary Zobel, Christopher	Virginia Tech, United States of America

Open Track

Local Communities and Government Collaboration

0	Argos Consortium Presentation	Leo Shou-Jensen	PDC
141	Action Research Supported Implementation of a Crisis Competence Centre	Harnesk, Dan Lindström, John Samuelsson, Sören	Luleå University of Technology, Sweden

Standardization and Ontologies

Architectures

208	Towards an interoperable data model for forest fire reports	Hernández de Juan, María Aedo, Ignacio Diaz, Paloma Diez, David Montero, Susana	Universidad Carlos III Madrid, Spain
225	Exploring Development of Service-Oriented C2 Systems for Emergency Response	Ingmarsson, Magnus Eriksson, Henrik Hallberg, Niklas	Linköpings universitet, Sweden; FOI Swedish Defence Research Agency

244	Reconsidering information management roles and capabilities in disaster response decision-making units	Bharosa, Nitesh	Delft University of Technology, Netherlands, The
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12:30 - 14:00 LUNCH

Location: ISCRAM2009 Lunch Venue

14:00 PARALLEL SESSIONS

Human-Computer Interaction

Interactive Map Technologies

200	Early flood detection and mapping for humanitarian response	De Groeve, Tom Riva, Patrick	Joint Research Center of the European Commission, Italy
223	Spatiotemporal Mashups: A Survey of Current Tools to Inform Next Generation Crisis Support	Liu, Sophia Palen, Leysia	ConnectivIT Lab, University of Colorado at Boulder, United States of America
242	An Indoor Positioning System for Improved Action Force Command and Disaster Management	Walder, Ulrich Bernoulli, Thomas Glanzer, Gerald Schuetz, Ruediger Wiessflecker, Thomas	Graz University of Technology, Austria

Humanitarian Actions and Operations

IT for Crisis Management in Africa

192	IT Infrastructure Enabling Open Access for Flood Risk Preparedness in South Africa	van Zyl, Terence Lesley Cwele, Bheki Agrippa Moodley, Deshendran Parbhoo, Chetna Shabangu, Petrus Sipho Umuhoza, Denise	The Meraka Institute, South Africa
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203	The Southern African Advanced Fire Information System	McFerren, Graeme Andrew Frost, Philip	Meraka Institute, South Africa
250	AIDA – Providing a framework for objective assessment of ICT for Disaster Risk Management in Africa	Kerle, Norman	ITC, Netherlands, The

Standardization and Ontologies

Interoperability

153	Collaborative process design for Mediation Information System Engineering	Truptil, Sébastien Benaben, Frederick Pingaud, Herve	Université de Toulouse - Ecole des Mines d'Albi-Carmaux, France
155	Using Architectures for Semantic Interoperability to Create Journal Clubs for Emergency Response	Powell, James E Collins, Linn Marks Martinez, Mark L. B.	Los Alamos National Laboratory, United States of America
206	Information Management for Crisis Response in WORKPAD	Vetere, Guido Faraotti, Alessandro Poggi, Antonella Salvatore, Bernardino	IBM, Italy; University of Rome, "La Sapienza"

Practitioners Workshop

Part 1- Introduction

15:30 COFFEE BREAK

16:00 PARALLEL SESSIONS

Human-Computer Interaction

HCI Design & Requirements

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| 154 | User Acceptance of Community
Emergency Alert Technology: A Case
Study | Wu, Philip Fei | University of Maryland, United States
of America |
| 204 | Mega-Collaboration: The Inspiration and
Development of an Interface for Large-
Scale Disaster Response | Newlon, Christine M.
de Vreede, Gert-Jan
MacDorman, Karl
Patel, Himalaya
Pfaff, Mark | Indiana University, United States of
America;
University of Nebraska at Omaha,
United States of America |
| 218 | Designing for Firefighters—Building
Empathy through Live Action Role-Playing | Denef, Sebastian
Dyrks, Tobias
Meyer, Daniel
Penkert, Berthold
Ramirez, Leonardo | Fraunhofer FIT, Germany;
Universität Siegen, Germany;
Institut der Feuerwehr NRW,
Germany |

Humanitarian Actions and Operations

Rapid Information Dissemination

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| 139 | Towards an IP-Based Alert Message
Delivery System | Soini, Jari Olavi
Jaakkola, Hannu
Lepp_niemi, Jari
Rantanen, Petri
Saari, Mika
Sillberg, Pekka | Tampere university of technology,
Finland |
| 152 | Geographically Visualizing Consolidated
Appeal Process (CAP) Information | Tomaszewski, Brian
Czárán, Lóránt | Rochester Institute of Technology,
United States of America;

Platform for Space-based Information
for Disaster Management and
Emergency Response (UN-SPIDER),
United Nations Office for Outer Space
Affairs (UNOOSA), Germany |

164	Rapid Geo-Image Communications for Disaster Management	Skinemoen, Harald Bjorgo, Einar Hall, Richard	AnsuR Technolgies AS, Norway; Unosat/Unitar; Kongsberg Satellite
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Research Methods

Research Methods

133	GDIA: a Cognitive Task Analysis Protocol to Capture the Information Requirements of Emergency First Responders	Rahubadde Kankanamge, Raj Prasanna King, Malcolm Yang, Lili	Loughborough University, United Kingdom
172	A Principled Method of Scenario Design for Testing Emergency Response Decision-Making	Drury, Jill L. Klein, Gary L. More, Loretta Pfaff, Mark	The MITRE Corporation, USA Indiana University Indianapolis; USA The Pennsylvania State Universit; USA
217	Evaluating the Impact of Improvisation on the Incident Command System: A Modified Single Case Study using the DDD Simulator	Franco, Zeno Beutler, Larry E. Blau, Kathy Holman, John Zumel, Nina	Pacific Graduate School of Psychology; Quimba Software

Practitioners Workshop

Part 2

19:00 CITY OF GOTHENBURG WELCOME RECEPTION

Location: To be announced

TUESDAY 12th: CONFERENCE DAY 2

08:45 Plenary

Announcements

Keynote presentation: Prof Martha Grabowski

Room: Malmstensalen

09:15 Practitioners Workshop

Part 3

10:00 COFFE BREAK

10:30 PARALLEL SESSIONS

Collaboration and Social Networking

Decision-Making

135	Group Decision-Making Method in the field of Coal Mine Safety Management Based on AHP with Clustering	Song, Yan Hu, Yinghui	Harbin Engineering University, China, Peoples Republic of
215	Crisis Decision Making Through a Shared Integrative Negotiation Mental Model	van Santen, Willem Jonker, Catholijn Wijngaards, Niek	Be Wind B.V., Netherlands, The,; TU Delft, Netherlands; D-CIS lab, Netherlands
248	Towards hybrid rational-naturalistic decision support for Command & Control	Grant, Tim	Netherlands Defence Academy, Netherlands, The

Human-Computer Interaction

Crisis Communication

167	CAP-ONES: An Emergency Notification System for all	Malizia, Alessio Acuna, Pablo Aedo, Ignacio Diaz, Paloma Onorati, Teresa	Universidad Carlos III de Madrid, Spain
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213	Computer Supported Collaborative Training in Crisis Communication Management	Reuter, Christian Muller, Claudia Pipek, Volkmar	University of Siegen, Germany
235	Towards a Distributed Crisis Response Communication System	Bradler, Dirk Aitenbichler, Erwin Liebau, Nicolas Schiller, Benjamin	TU Darmstadt, Germany

Open Track

Computing Situation Awareness

173	Computed Ontology-based Situation Awareness of Multi-User Observations	Fitrianie, Siska Rothkrantz, Leon J.M.	Delft University of Technology, Netherlands, The; Delft University of Technology, Netherlands, The
198	An Emergency Response Model Toward Situational Awareness Improvement	Sapateiro, Cláudio Antunes, Pedro	High School of Technology, Portugal; University of Lisbon, Portugal
201	Crowd control by multiple cameras	Rothkrantz, Leon J.M. Yang, Zhenke	TU Delft, Netherlands, The

Practitioners Workshop

Part 4- Summing Up

12:30 – 14.30 LUNCH BUFFET with HANDS-ON DEMO SESSION and POSTERS

14:30 PARALLEL SESSIONS

Collaboration and Social Networking

Designing for Collaboration

170	Designing Collario for Continuous Reviewing and Practicing of Emergency Plans to Ensure Complex System Safety	Yao, Xiang Chumer, Michael Turoff, Murray	New Jersey Institute of Technology, United States of America
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195	Information Sharing Using Live Video in Emergency Response Work	Bergstrand, Fredrik Landgren, Jonas	Viktoria Institute, Sweden
228	Technical and Cultural Heterogeneity in Hastily Formed Networks for Disaster Response	Sigholm, Johan Nadjm-Tehrani, Simin Törnqvist, Eva	Dept. of Technology and Social Change, Linköping University, Sweden; Dept. of Military Studies, Swedish National Defence College, Sweden; Dept. of Computer and Information Science, Linköping University, Sweden

Intelligent Systems

Knowledge, Training and Smart Environments

175	OpenKnowledge at work: exploring centralized and decentralized information gathering in emergency contexts	Marchese, Maurizio Besana, Paolo Rizzi, Veronica Trecarichi, Gaia Vaccari, Lorenzino	University of Trento, DISI, Italy; University of Edinburgh, CISA, UK
177	Self-Organizing Resource Network for Traffic Accident Response	Levashova, Tatiana Kashevnik, Alexey Krizhanovsky, Andrew Shilov, Nikolay Smirnov, Alexander	St. Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences, Russian Federation
181	Crisis response simulation combining discrete-event and agent-based modeling	Gonzalez, Rafael A.	Delft University of Technology, Netherlands, The

Research Methods

Ethnography and Field Reports

116	Red, white and blue with a little bit of green: an ethnographic study into the Emergency Response Rooms in the City of Amsterdam.	Boersma, Kees Groenewegen, Peter Wagenaar, Pieter	VU University Amsterdam, Netherlands, The
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234	Socio-spatial implications of converging physical and digital infrastructures for crisis management: Ethnography of two service technician working environments of a power provider company	Müller, Claudia Pipek, Volkmar	University of Siegen, Germany
187	Sharing Knowledge: How to Highlight Proven Experience in the Swedish Armed Forces	Pettersson, Ulrica	The Swedish Armed Forces Collage, Sweden

16:00 COFFEE BREAK

16:30 – 17:30 ISCRAM ASSOCIATION MEETING

Location: Malmstensalen

18:00 BOAT TRANSPORT TO CONFERENCE DINNER

Departure point: to be announced

WEDNESDAY 13th CONFERENCE DAY 3

08:45 PLENARY

Announcements

Keynote presentation: Katrin Verclas

Room: Malmstensalen

10:00 COFFEE BREAK

10:30 PARALLEL SESSIONS

Collaboration and Social Networking

People and Social Media

163	An Online Social Network For Emergency Management	White, Connie Hiltz, Starr Roxanne Kushma, Jane Plotnick, Linda Turoff, Murray	New Jersey Institute of Technology; United States of America
171	Repairing Human Infrastructure in War Zones	Mark, Gloria Janet Al-Ani, Ban Semaan, Bryan	University of California Irvine, United States of America
211	Twitter Adoption and Use in Mass Convergence and Emergency Events	Hughes, Amanda Lee Palen, Leysia	University of Colorado at Boulder, United States of America

Humanitarian Actions and Operations

Modeling of Humanitarian Operation

142	Learning from previous humanitarian operations, a Business Process Reengineering approach	Charles, Aurelie Lauras, Matthieu	Universite Toulouse - Mines Albi, France
165	Using a Workflow Management System to Manage Emergency Plans	Sell, Christian Braun, Iris	SAP Research CEC Dresden, Germany; Technical University of Dresden, Germany
241	How Information Systems Can Improve Humanitarian Logistics: A View from the Field	Howden, Michael	Humanitarian Consultant, New Zealand

Open Track

Dependability and Vulnerability

131	An Indicator Framework to Assess the Vulnerability of Industrial Sectors against Indirect Disaster Losses	Merz, Mirjam Hiete, Michael	University of Karlsruhe, Germany Center for Disaster Management and Risk reduction Technology
132	Dependability of IT Systems in Municipal Emergency Management	Weyns, Kim Martin Höst	Lund University, Sweden
178	Capabilities of C2 Systems for Crisis Management in Local Communities	Hallberg, Niklas Erland Jungert	Swedish Defence Research Agency, Sweden

12:30– 13.45 LUNCH

14:00 PARALLEL SESSIONS

Collaboration and Social Networking

Lightweight Stakeholder Collaboration

130	Disasters2.0: Application of Web2.0 technologies in emergency situations	Camarero, Julio Iglesias, Carlos A.	ETSIT UPM, Spain
144	Web based macroseismic survey: fast information exchange and elaboration of seismic intensity effects in Italy.	De Rubeis, Valerio Sbarra, Paola Tosi, Patrizia	Istituto Nazionale di Geofisica e Vulcanologia, Italy
233	Expectation of Connectedness and Cell Phone Use in Crisis	Sheetz, Steven D. Byoung Joon, Kim Kavanaugh, Andrea Quek, Fancis	Virginia Tech, United States of America

Intelligent Systems

Simulation and Resource Allocation

191	Using Computer Simulation for Emergency Response: Lessons Learned from the FireGrid Project	Potter, Stephen Wickler, Gerhard	University of Edinburgh, United Kingdom
207	Market Based Adaptive Resource Allocation for Distributed Rescue Teams	Airy, Guruprasad Mullen, Tracy Yen, John	The Pennsylvania State University, United States of America
249	DMT-EOC – A combined system for the Decision Support and Training of EOC Members	Engelmann, Hagen Fiedrich, Frank	1: Karlsruhe University, Germany; 2: The George Washington University, United States

Open Track

Information Processing in Environmental Crisis

159	Approaches to visualisation of uncertainties to decision makers in an operational Decision Support System	Raskob, Wolfgang Gering, Florian Bertsch, Valentin	Forschungszentrum Karlsruhe, Germany Bundesamt für Strahlenschutz EnBW
176	Central response to large chemical accidents	Jensen, Jan Steen Pehrsson, Jan	Danish Emergency Management Agency, Denmark. Prolog Development Center, Denmark
210	Integrating Scenario-Based Reasoning into Multi-Criteria Decision Analysis	Comes, Tina Hiete, Michael Wijngaards, Niek	Universität Karlsruhe (TH), Germany; Thales Research & Technology Netherlands

15:30 – 16:30 CONFERENCE CLOSING

Community Awards
ISCRAM 2010 - Preview
Closing ceremony

