



5th International Conference on
Information Systems for
Crisis Response and Management

Washington, DC, USA
May 4-7, 2008
<http://www.iscram.org>

CALL FOR PAPERS

FOR A SPECIAL ACADEMIC SESSION ON

Geographic Information Science

Session ID: TECH-01

Motivation

Geospatial information and technologies are often critical elements of emergency response systems, and within the disaster cycle as a whole. Through all phases of the disaster cycle, planners, responders, decisions makers, and the public have a need for data, information systems, and technologies that contain a geospatial component. Examples of this range anywhere from the real-time tracking of relief supplies to public web interfaces showing evacuation routes and shelters. The geospatial component in crisis management is critical as ever. Disasters of larger geographic scales and intensity necessitate complex response, coordination, and sustained commitments over time from a myriad of actors requiring geospatial information, in part, for situation awareness and decision making.

Research Area

Geographic Information Science (GIScience) encompasses the theoretical and conceptual elements that underlie Geographic Information Systems (GISystems) and related geospatial technologies relevant to crisis management. These elements include geospatial information visualization, representation, interaction, and sense making, spatiotemporal reasoning, the impacts of GISystems on society and individuals, the impacts of society and individuals on GISystems and fundamental spatial themes from fields such as geography, geodesy, and cartography. Furthermore, GIScience is fundamentally interdisciplinary, incorporating research from the fields of geography, information science, cognitive science, computer science, psychology, mathematics, philosophy, statistics, and anthropology. Because of this broad interdisciplinary perspective, research in GIScience is well suited to address a wide variety of application domains that utilize geospatial information and technologies.

Critical crisis management research challenges exist that GIScience has the potential to address. GIScience, however, cannot address the key problems on its own – there needs to be collaboration between GIScience and the other disciplines involved in advancing information technologies and our understanding of their use in the crisis management domain.

Topics

This session therefore seeks to examine GIScience perspectives on crisis management and welcomes papers dealing with (but not limited to) the following topics:

- Interfaces to geospatial information and technology in crisis management (HCI, human-factors, user requirements, GISystem interface design / strategies / techniques, integrated web-field-office systems)
- Geographical Visualization and Geovisual Analytics in crisis management
- Geographic representation of social and natural components in crisis management
- Geocollaboration with geospatial technology (theory, concepts, best practices) and its relationship to Computer Supported Collaborative Work (CSCW)
- Geospatial knowledge management to support crisis management
- Geospatial cognition in individuals, teams, and groups in crisis management (including distributed and situated cognition, transactive memory, situation/context awareness)
- Opportunities and challenges with geospatial information to support crisis management. Including social/cultural issues and overcoming barriers to data sharing and cooperation
- Spatial Decision Support Systems
- Geospatial data collection and models for crisis management (including integrating geospatial data with non-spatial data)
- Open and/or public geospatial data sources for use in crisis management
- The use of Open Geospatial Consortium (OGC) Standards (Web Map and Feature Services, GeoRSS etc.) as a means towards geospatial data standardization, sharing, and system interoperability
- Spatial algorithms for crisis management
- Geographic Information Retrieval (GIR)
- Novel uses of geospatial technologies (hardware, software, and applications)
- Time in GISystems

Type of contribution:

- **Academic Session:** we invite researchers from academia or research labs to present their research or research-in-progress papers. Prospective presenters submit a regular research (or research-in-progress) paper.

Important Notice:

- All submissions must be formatted according to the ISCRAM 2008 formatting guidelines. Templates and instructions are published on www.iscram.org.
- All submissions must be submitted through the ISCRAM 2008 conference paper submission web page at www.conftool.com/iscram2008. Instructions for the ConfTool system can be found on www.iscram.org.
- All papers and presentations will go through a double-blind review process, leading to a decision of (conditional) acceptance or rejection.
- Accepted papers will be included in the ISCRAM 2008 program and published in the official proceedings if and only if
 - (1) the paper is formatted according to the instructions,
 - (2) the authors sign the copyright transfer form and

- (3) one of the authors registers for the conference and pays the registration fee before the cut-off date for early registration.
- Authors who have multiple papers accepted can only register for and present one paper at the conference; co-authors need to register separately.

Session Chairs:



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Important ISCRAM 2008 Dates:

- December 21, 2007: Paper submission deadline
- February 10, 2008: Notification of (conditional) acceptance
- February 22, 2008: Early registration deadline
- March 1, 2008: Final camera-ready paper submission deadline
- May 4-7, 2008: ISCRAM 2008

About ISCRAM:

The ISCRAM Community is a worldwide community of researchers, scholars, teachers, students, practitioners and policy makers interested or actively involved in the subject of Information Systems for Crisis Response and Management. At its annual international conference alternating between the US and Europe, the ISCRAM Community gathers to present and discuss the latest research and developments in this growing area during an interactive and stimulating 3 day program. The ISCRAM Community also organizes an International Summer School for PhD students and ISCRAM-CHINA, an annual conference for ISCRAM research in China. All information on ISCRAM can be found at <http://www.iscram.org>

ISCRAM 2008 will be held from 4-7 May at the George Washington University (GWU) located in Washington, DC, USA. The conference will be hosted by GWU's Institute for Crisis, Disaster, and Risk Management (ICDRM). All details on this conference will be made available via the ISCRAM website mentioned above.