CALL FOR PAPERS

FOR A SPECIAL ACADEMIC/PRACTITIONER/Demonstration
SESSION ON

Human Computer Interaction
in Crisis Management

Session ID: 30HCIS

Motivation for this session:
In crisis situations decision makers are confronted with so-called chaotic complex environments: environments that constantly change in reaction to different causes that are not easily influenced or understood. Hence information systems for crisis management must reliable, effective, safe and trustworthy. Moreover whenever a critical situation arises in which humans have to react quickly and wisely, the quality of the user interface of the system is crucial.

Research Area:
The central theme of the special session is the design of user interfaces for software systems used in crisis management. Natural multi-modal interaction capabilities reflecting human cognitive qualities are a promising concept for this area. Multi-modality is expected to resolve uncertainties and ambiguities in input recognition, interaction management and information presentation. Therefore, multi-modal user interfaces will contribute to important features of professional environments such as reliability, effective information transfer, safety, adaptivity, and robustness of communication between humans and software systems. For an interface to be of any use to a human operator, system information has to be presented in such a way that it should benefit the operator. This involves summarizing, choosing modalities, fusing, managing, repeating, accentuating,
filtering, simplifying, and changing the output presentation, based on the available information produced by the dialog and action manager. Finally, the interface needs to know about the user or users that interact with the interface. There can be particular user preferences (e.g. patterns of the use of sequential and parallel input modalities) and short-term and long-term user characteristics that need to be incorporated in order to improve smooth and effective interaction in crisis situations. Among the latter are personality characteristics and the affective state of the user. Inferring the cognitive/affective state of the user (including the detection of cognitive overload) from the available sensors and adapting the interaction and the interface to this affective state is an important issue in the design of interfaces for crisis management systems. Moreover the user interface design should be based on a sound user centred design process, respecting the human operators’ capabilities and limitations; adequate operation sequences which are natural and straightforward to the user must be designed; appropriate user interface elements with carefully designed output properties must be implemented; clear and unambiguous optical appearance and interaction affordance must be defined; and usability testing and evaluation methods must be used to identify and eliminate usage problems.

Topics
Some non-exhaustive examples of topics that could contribute to this session are:

- Multimodal Interaction
- Affective Dialog Systems
- Emotions in Interaction
- User interface design issues
- Aspects of man-machine-communication
- Cognitive resources in stressful situations
- Trust in Adaptive Interactive Systems
- Information management
- Ontology’s for Interactive Systems

Type of contributions:

- **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 which will be reviewed according to the usual academic standards.

- **Practitioner Session**: we invite practitioners to present their practice or experiences in information systems development, use or needs. Prospective presenters submit a PowerPoint presentation which will be reviewed according to standards of relevance and contents.

- **Demonstration and Simulation Session**: we invite presentations of non-commercial demonstrations of Crisis Management systems focusing on Human Computer Interaction. Simulations (games) are also welcome. Prospective contributors submit a description of the demonstration or simulation they intend to present at the conference. These will be reviewed according to standards of relevance to the general theme of the conference.
**Important Notice:** All submissions must be submitted to the ISCRAM2007 central email address: iscram2007@iscram.org.

All submissions must be formatted according to the ISCRAM2007 instructions published on iscram.org. All papers, presentations or demos will go through a double-blind review process, leading to a decision of (conditional) acceptance or rejection. Acceptance rates at previous conferences were at 50-60 percent.

Accepted papers will be included in the ISCRAM2007 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 (see iscram.org) and (3) one of the author’s 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**

**Dr. Mannes Poel**  
mppel@cs.utwente.nl  
Department of Computer Science  
University of Twente  
The Netherlands

**Prof. Dr. Gerd Szwillus**  
szwillus@upb.de  
Computer Science Institute  
University of Paderborn  
Germany

**Adam Geitgey**  
ageitgey@esi911.com  
**Emergency Services integrators**  
USA
Important ISCRAM2007 Deadlines:

- Paper Submission Deadline: January 15, 2007
- Notification of acceptance: February 22, 2007
- Closing date Early Registration: March 1, 2007
- Final version submission deadline: March 15, 2007
- ISCRAM2007: May 13-16 2007

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 ISCRAM-CHINA, an annual conference for ISCRAM research in China. All information on ISCRAM can be found at http://www.iscram.org

This year the conference will be held from 13-16 May in the Netherlands in the city of Delft. All details on this conference will be made available via the ISCRAM website mentioned above.

---

**TIP!**

*If you have the intent to submit a paper or presentation* to one or more sessions, the session organizers would greatly appreciate an early, voluntary, notification. Please send your abstract TO: the Session Chair(s) (See e-mail addresses above) *and CC* it to: iscram2007@iscram.org.

**The subject of the mail should be:**
"Abstract for <session ID> on <your short title>"

**The content of the mail should include:**
- The type of contribution you want to submit: an academic paper, a presentation or a demo
- The title of your contribution
- A short description (abstract) of your contribution (10 lines)
- Any remarks/questions you have.

The session organizers will answer any questions you have, and may provide you with some tips.

Please note that submitting an abstract is not obligatory; it will be appreciated however. The organizing committees will not review the abstracts, or make a selection on the basis of abstracts. Only the final and full submissions will be used for this purpose. Sending an abstract does not oblige you to submit the full paper.