ISCRAM

NEWSLETTER

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Editorial
Conferences and Workshops – the lifeblood of our community

A theme running through many of the articles in this edition of the ISCRAM Newsletter is that of meetings. A decade ago ISCRAM began with an international workshop in Brussels. This year we have already held an amazing, enjoyable and, above all, thought-provoking conference in Baden-Baden; still to come are ISCRAM-Asia, ISCRAM-Vietnam and, of course, the 5th ISCRAM Summer School. We are a community which likes to meet, discuss and deliberate on our subject.

The ISCRAM Board, as you will see from the reports, is working to standardise procedures for setting up ISCRAM events, recognising that they will take many forms: our annual world conference, continental or regional conferences such as ISCRAM-Asia, and conferences focused within a country or such as ISCRAM-Vietnam – though I should add that international participation is encouraged at all ISCRAM events. These procedures are designed to protect the quality of our events and ensure that we meet the needs of all communities: be they academic, practitioner, policy maker or whatever.

ISCRAM wishes to encourage more workshops, conferences and events, in addition to our annual world one. Moreover, it would also welcome proposals for workshops and conferences focusing on a specific topic. If you are interested in organizing any of these sorts of events, please contact us at events.iscram@gmail.com

In the meantime, let us thank the organisers of ISCRAM2013 for their fantastic efforts and wish the organisers of future ISCRAM events the energy and effectiveness to continue to surpass the standards set to date.

Simon French
Newsletter Editor
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Contents

ISCRAM Summer School

The **2013 ISCRAM Summer School** will be hosted at Tilburg University (August 21-28). This year, lectures and hands-on exercises, including a three day stay in Campus Vesta in Belgium, will focus on Humanitarian Information Management and Logistics. We wish all participants an enjoyable and productive time!

Institutional Members

Partners

ISCRAM Board Election Results

A lot of people know this already, but after a very close election the following were elected to the ISCRAM Board at the 2013 General Assembly:

  Tina Comes
  Julie Dugdale
  Linda, Plotnick
  Bartel van de Walle
  Chris Zobel

They join

  Zeno Franco
  Tim Grant
  Mark Haselkorn
  Murray Turoff
  Gerhard Wickler

to form the new board. Bartel van de Walle remains president, Julie Dugdale Vice-President and Gerhard Wickler Treasurer; and Chris Zobel becomes the Secretary.

ISCRAM Board

The newly established board has got down to business. Among its various activities, it has formally established an Ad-hoc Committee on Practitioner Relations, to be chaired by Mark Haselkorn and Robin Mays. This is an important part of the effort to continue strengthening practitioner involvement in the organization.

The Board as a whole is also working on assessing bids for future ISCRAM-associated conferences, and actively providing oversight on a number of upcoming ISCRAM conferences and workshops:

- ISCRAM-X Vietnam 2013
- ISCRAM-Asia 2013
- ISCRAM Summer School 2013
- ISCRAM 2014

In particular, the general call for papers for ISCRAM 2014 (www.iscram2014.org) has just been finalised.

Given the growing number of ISCRAM-associated events, the Events and the Publications and Academic Standards Committees together with the Board are working on harmonizing the reviewing guidelines for different categories of conference submissions. This harmonization effort has aimed at making the processes and standards of all ISCRAM events comparable and transparent, yet to do so in such a way that creative new ideas are fostered. In this manner, we can better communicate the high standards and quality of full papers submitted to our conferences and workshops. At the same time, the reviewing guidelines will provide better guidance for Track Chairs, Reviewers and Authors.

This work has also involved reviewing other operational aspects of the conferences, such as the programme and track chair guidelines, with a goal of having a stable set of standards and requirements that stay the same every year for every ISCRAM event.

Among its other ongoing activities, the Board is also actively working on a plan for indexing and archiving the ISCRAM conference proceedings, in order to guarantee that the conference outputs are available and accessible as the organization moves into the future.

ISCRAM2013

A Great Conference!

Each year our conferences get better and better and the 10th ISCRAM world conference was a true celebration of a decade of ISCRAM. The ISCRAM2013 Programme and Conference teams did us proud this year. Baden-Baden was a beautiful setting for our discussions. The lunches and dinners give us a taste of the wonderful regional cooking. The 'boys toys brigade' amongst us were delighted by a demonstration of a drone helicopter finding a suspect bag in the lawns outside the centre. Two musical interludes and Andrea Tapia's presentation of ISCRAM2014 (see page 4) were highlights at the conference dinner. Above all there were many magnificent, thoughtful and thought-provoking papers. The proceedings have been published at:
www.iscramlive.org/portal/iscram2013procee dings.

Difficult though it was, two papers were selected for the best paper and best student paper awards.

Best Paper for ISCRAM 2013

Muhammad Imran, Shady Elbassuoni, Carlos Castillo, Fernando Diaz and Patrick Meier won the best paper – and did so in a truly deserving fashion in a tight contest. Their paper was titled: "Extracting Information Nuggets from Disaster-Related Messages in Social Media". They write:

  "We were delighted to be awarded the Best Paper Award for our paper. This described our recent work where we explored the role of microblogging websites during emergencies. Microblogging websites, such

as Twitter, play an important role during a crisis. When a disaster strikes, hundreds of thousands of microbloggers come to Twitter to share their experiences. This huge number of tweets contain informative messages that can be used for situational awareness, and not only that, the challenging part of it is that a large number of these messages may be misleading, non-informative hence not interest of crisis responders. However, the informative messages may contain key information such as damage reports, donations services, casualties reports, shelter announcements, food availability, which is very crucial for crisis responders to obtain and to accordingly act upon.

"In this paper, we introduced an automatic system which extracts information from microblog posts. Specifically, we focus on extracting brief, self-contained actionable messages relevant to disaster response. We used real-time supervised learning methods combined with machine learning approaches to perform classification and information extraction tasks. For experimentation and evaluation we collected Joplin 2011 tornado dataset that struck Joplin, Missouri in the late afternoon of Sunday, May 22, 2011. The 206,764 unique tweets were selected by monitoring the Twitter Streaming API using the hashtag #joplin a few hours after the tornado hit.

"We used CrowdFlower crowdsourcing platform to annotate 4,406 messages sampled uniformly at random from the dataset and asked workers to label using the ontology shown in the paper. A set of multi-label classifiers were trained using various binary as well as linguistic features to automatically classify a tweet into one or more of the identified classes. For this purpose, we use Naïve Bayesian classifiers as implemented in Weka. High performance measures (i.e., precision, recall and auc) prove the viability of our system.

"The results of this applied and ongoing research will continue to inform the development of the Qatar Computing Research Institute's (QCRI) Artificial Intelligence for Disaster Response (AIDR) platform (http://aidr.qcri.org/). The purpose of this platform is to provide humanitarian organizations like the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) with a platform that will enable them to create their own automatic classifiers on the fly."

Further details of their work are available at: http://chato.cl/papers/imran_elbassuoni_castillo_diaz_meier_2013_practical_extraction_disaster_crisis.pdf

Best Student Paper for ISCRAM 2013

Satria Hutomo Jihan won the best student paper award. Satria is the first Masters student to win this award. His paper, titled *Context Ontology for Humanitarian Assistance in Crisis Response*, deals with how to build a system that will process all the incoming crisis information and suggest possible responses for the decision makers. Furthermore, the paper suggests a method how to display a map with all the crisis locations, each one with its specific needs. In addition, it prioritizes the responses to make it easier for the decision makers if there are too many needs and not enough resources. If you thought that was cool, then note that the entire process is done automatically, before even a single person has the time to read all the incoming information.

When a crisis arises, the actual needs must be identified before the emergency actions are taken, so as to provide proper humanitarian assistance quickly in such emergency cases. However, decision makers face the challenge of identifying the crisis needs from massive information about the crisis which may appear at once and in unstructured format. Unstructured information is un-annotated data intended only for human readable presentation. The unstructured information from different sources may also have different expressions for similar needs. For example, some people may use different food brand names to express the food needs. These issues may hinder machines to process the information automatically and transform it into useful knowledge representation that depicts the actual crisis needs.

Ontologies, which can be described in simple terms as a network depicting concepts and the relations among them, have been used to provide structured information that creates meaningful relationships between information resources and to allow machines to process, infer, or combine the information from different sources automatically into a consistent body of knowledge. In crisis response, ontologies can unify data from different resources syntactically and semantically. However, the related domain experts who are required to construct ontology may not be available during the crisis.

This paper presents a model for a crisis response system that provides representations of humanitarian needs and recommendations for humanitarian assistance for decision makers. In particular, this paper uses context ontology as a

main feature of the system for structuring input information and uses logic rules to process the input information with the corresponding domain expert sources so as to provide humanitarian assistance to the right place while addressing the right needs.

The context ontology system proposed in this paper consists of two ontologies: the crisis identification ontology that can identify crisis impacts of the certain place and time with related actors and the crisis response sub-ontology that can utilize corresponding crisis response sources. Using these ontologies and logic rules, the context ontology system can automatically propose the possible humanitarian responses based on the actual needs.

If you are interested, then you are invited to read the full version of the paper at: www.iscramlive.org/portal/iscram2013proceedings.

ISCRAM2014

INVITATION FROM THE CONFERENCE ORGANISERS

We would like to cordially invite you to attend the next annual ISCRAM meeting to be held in State College, Pennsylvania, USA. The conference will be intellectually stimulating, continue longstanding ISCRAM traditions, build new networks and friendships, and of course, offer new opportunities for international beer sampling and heated academic discussions. Pre-conference activities will begin on Sunday May 18th and the final closing sessions will wrap up on Wednesday, May 21st.
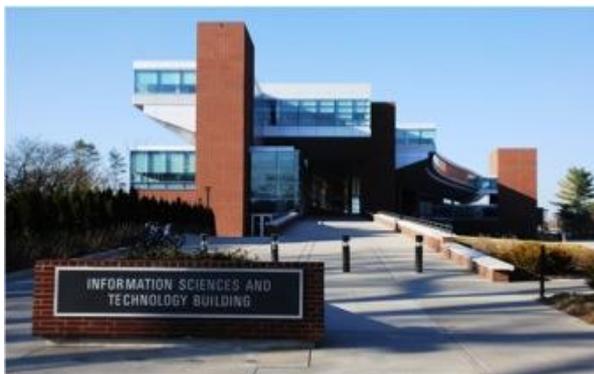
To learn more about the conference please visit

our website at http://iscram2014.org.

ISCRAM2014 THEME

The theme for ICSRAM2014 is empowering citizens and communities through information systems for crisis response and management. Through this theme we focus on the local community, the individual and the technologies that can be employed to improve crisis response at the very local level. ISCRAM2014 will reframe first responders as everyday people who provide first aid, transport victims to hospitals in their own cars, and begin search and rescue rather than only the trained emergency response professionals. ISCRAM2014 will reframe information systems for emergency response as socially-distributed information systems, in which information is disseminated within and between official and public channels and entities. ISCRAM2014 will advocate innovative ICT, to leverage the power of the collective intelligence of the citizenry to support natural instincts, which are to search for reliable information using any means possible to optimize for local conditions.

ISCRAM2014 SPEAKERS

We have also also lined up three influential and stimulating keynote speakers.   Our first keynote speaker is Dr. Leysia Palen, an Associate Professor of Computer Science at the University of Colorado, Boulder and a faculty fellow with the Institute for the Alliance of Technology, Learning and Society and the Institute of Cognitive Science. She is the Director of the Connectivity Lab and principal investigator on Project EPIC: Empowering the Public with Information in Crisis. Our second speaker is Mr. Edward G. Happ, the CIO of the International Red Cross and Red Crescent Societies, based in Geneva, Switzerland, and Chairman of NetHope (www.nethope.org), a U.S. based consortium of 38 leading international relief, development and conservation nonprofits focused on information and communications technology and collaboration. Thirdly, we have Dr. Patrick Meier, who serves as Director of Innovation at the Qatar Computing Research Institute. Prior to QCRI, co-founded and co-directed the Harvard Humanitarian Initiative's Program on Crisis Mapping and Early Warning. He served as

Director of Crisis Mapping at Ushahidi & co-founded CrisisMappers, Digital Humanitarians and the award-winning Standby Task Force.

ISCRAM2014 LOCATION

The conference will be held in State College, Pennsylvania, USA. This small university town is home to Penn State University, ranked among the top-fifteen public universities in the United States. Annual enrollment at the University Park campus totals more than 44,000 graduate and undergraduate students, making it one of the largest universities in the United States. It is a town of about 43,000 residents without counting students. When classes are in session the population swells to near 90,000. The town has been ranked as one of the safest, smartest, least stressful, and most entertaining places to live in the United States. The weather in May is beautiful with temperatures hovering near 70F/21C daily. The town has its own airport, but can also be reached by inter-city bus and car. It is approximately 3-4 hours driving distance from New York City, Philadelphia, Baltimore, Washington, DC and Pittsburgh.

ISCRAM 2014 HOSTS

ISCRAM2014 has officially two hosts housed within Penn State University, the College of Information Sciences and Technology and the GeoVISTA Center. The College of Information Sciences and Technology (IST) is an interdisciplinary program started in 1998 that links computer science, users and information technology. Faculty specialize in six key areas including; (1) social policy, economics and informatics, (2) human-computer interaction, (3) security, privacy and informatics, (4) information systems, (5) computational informatics, and (6) cognition and networked information systems. The Geographic Visualization Science, Technology, and Applications Center (GeoVISTA) is interdisciplinary and, over the past decade, emphasis has expanded from geovisualization to all aspects of GIScience and related information sciences. GeoVISTA's specific mission is to coordinate integrated and innovative research in Geographic Information Science, with an emphasis on geovisualization. GeoVISTA conducts information and cognitive science research focused on six main themes: (1) Geographic Representation, (2) GeoVisual Analytics, (3) Knowledge Management & Geocollaboration, (4) Spatial Cognition & Human Factors, (5) Risk Assessment & Spatial Decision Support, and (5) GeoSemantics.

ISCRAM2014 FACILITIES

The conference activities will be principally held within the Information Sciences and Technology Building on Penn State Campus. The building, built in 2004, is a striking 199,000 square-foot structure whose sweeping lines stir the imagination of passersby. Its creators were inspired by the Ponte Vecchio in Florence. Classroom spaces utilize a state-of-the-art telecommunications and multimedia infrastructure. The entire building features wireless capabilities that encourage groups to move freely within the space while being connected to the Internet and other Web-based services. The conference hotel is the Nittany Lion Inn, approximately a 5-minute walk to the conference building. It is also a 10-minute walk to the downtown center where most restaurants, bars and shopping are located. The hotel offers a free shuttle to and from the airport, which is located 15 minutes away from the hotel. The Inn has hosted the likes of Presidents Eisenhower and Johnson, Eleanor Roosevelt, Helen Hayes and Louis Armstrong. Built in 1931, the Nittany Lion Inn features 223 non-smoking guest rooms, a dining room, Whiskers Lounge, a fitness room, campus two 18-hole golf courses, use of campus facilities, campus swimming pool and tennis courts, museums and theatres. The Inn is run by the prestigious Hospitality Services department of Penn State University.

ISCRAM2014 EVENTS AND ACTIVITIES

In the grand tradition of ISCRAMs past, we will host a casual beer night on Sunday at a local pub, a more formal welcome reception at Penn State's Arboretum and Botanical Gardens on Monday evening and a conference banquet in the grand ballroom of the Nittany Lion Inn on Tuesday evening. In addition, because ISCRAM2014 will be held in a vibrant College town the conference hotel and main venue are within walking distance of over a hundred bars and restaurants. Outdoor activities, like golf, hiking, caving, ballooning and adventure challenge courses are also readily available to conference attendees and guests.

TRACKS FOR ISCRAM 2014

All papers and panel proposals should be submitted to the most appropriate track chair, for ISCRAM 2014. We have an interesting and diverse list of tracks, with some "core" ones that are similar to those from recent years, and some new ones for this year. Many of the chairs of traditional tracks have chaired these tracks previously and so are quite experienced with both the track functions and ISCRAM conferences.

All proposals were systematically reviewed and rated by the Program Committee.. Efforts were made to maximize the quality of the tracks and to ensure that their calls and foci included relevance to the ISCRAM 2014 conference theme.

As of July 15, core tracks similar to ones in the past, some with new organizers, include:

- Analytic Modeling and Simulation
- Command and Control
- Decision Support Systems
- Disaster Relief Supply Chain Management
- Ethical, Legal and Social Issues of IT Supported Emergency Response
- Geographic Information Science
- Humanitarian Information Systems
- Intelligent Systems
- Planning, Foresight and Risk Analysis
- Practitioner Cases and Practitioner- Centered Research
- Serious Games for Crisis Management
- Social Media in Crisis Response and Management

The new tracks for this year include:

- Visual Analytics for Crisis Management
- Community Engagement in Crisis Informatics Research.

In addition, there will be a special session in the Community Engagement track on Citizens Observatories for Crisis Management, and possibly one other new track or special session.

So it is time to start thinking about what paper(s) you will submit this year. Be sure to look over the new track proposals and lists of topics first to decide where your work best fits, and to communicate with appropriate track corresponding co-chairs if you have any doubts. If you have submitted in the past, you will probably receive one or more track Calls for Papers and also an invitation to serve as a reviewer of papers in that track. Full papers will be due by **November 15** and shorter papers by **January 13**.

Andrea H. Tapia
Conference Organizer

Starr Roxanne Hiltz,
Program Chair

An Interview with Jack Harrald

Jack Harrald *is currently the Associate Director of the Global Forum on Urban and Regional Resilience at Virginia Tech, in Arlington, Virginia. He previously was the Head of the Institute for Crisis, Disaster, and Risk Management at George Washington University.* **Chris Zobel** *recently spoke with him about his experiences associated with creating and running an academic program in disaster management.*

CZ: Thank you very much for being willing to discuss your perspective on developing a graduate education program in crisis management. I know that your insights will be very valuable to others who may be looking to establish similar programs, and I very much appreciate you taking the time to talk with me and to share your experience with the ISCRAM community.

My first question is about the focus of the graduate education program that you helped to establish. This program is located within the Institute for Crisis, Disaster, and Risk Management (ICDRM) at George Washington University, which is currently a part of the Department of Engineering Management and Systems Engineering. Does this mean that the program primarily focuses on training students with backgrounds in engineering? Or do the students have a variety of different backgrounds?

JH: The story of both the ICDRM and graduate program is more one of evolution than design. In 1993/94 I started to work with Jerry Post (Psychiatrist in the Elliott School of International Affairs, former CIA analyst and profiler), and Joe Barbera (Emergency Room Doc and advisor to FEMA for the formation of the urban search and rescue program). We decided to charter an Institute--we went through the process and got a 5 year charter as a University Institute. Soon thereafter, however, the University decided that all Institutes should report to one Dean, so we went under the Engineering School (since I was the lead). Within another year we were seen as a departmental institute. That made us unique at the time, but limited our ability to do inter-disciplinary work.

I started teaching a course in IT in disaster management, and Joe Barbera left the medical school and got a contract position in our department; we decided to try to create a concentration in the master's degree program.   The GW form for degree approval had a doctoral block as well as the masters--- with very little thought we checked that box also,

and at the end of the process in 1998 we found that we were the first such doctoral program in the nation. The doctoral program was and is very popular – approximately 70 graduates. Some are in university positions in the US, several run centers around the world, others work professionally in everything from the UN to the Aga Khan Foundation, to the Mexican Emergency Management agency, FEMA, DHS, etc., as well as the consulting world. The Masters program had the Engineering Management core plus 6 concentration courses. Joe and I designed the initial courses, found some part time and full time faculty to teach and we were off and running.

Around 1998, the Engineering Management Department absorbed the OR department and we became the Department of Engineering Management and Systems Engineering. This eventually increased the quantitative component of both the masters and doctoral program. I think that the management and systems engineering basis, and the existence of a sustained research program, make the GW program unique....most of the academic programs are social science based or are at the undergraduate level aimed at first responder qualifications.

CZ: To what extent did you need to create new courses when the program began?

JH: Over time we created about 10 courses, wrote the curricula for several FEMA higher ed courses and helped several other universities establish programs. Most of this was demand pull--students defined the need and in some cases alumni wrote the text books. There are a lot of curriculum materials and texts available today that were not around 15 years ago. 9-11 resulted in a great growth in the number of programs.

CZ: Where did the resources come from to add new courses? Did funded research through the Institute play a part in supporting more academic offerings, and/or were you able to secure institutional commitment from the University for new faculty positions?

JH: Most of what we built was sweat equity, though doctoral students and research faculty funded by project funds kept the enterprise alive. Joe Barbera and I were the only full time faculty involved, until Frank Fiedrich and Greg Shaw joined the faculty, and the doctoral research assistants were key to our survival and growth. Irmak Renda Tanali (now at UMUC), Sergio de Cosmo (now with the World Bank), Greg Shaw (who finished our program, was hired to a faculty slot, and took my place as co-director), Firoz Verjee (now with the Aga Khan foundation) and Chris Salmon (now on the faculty at one of the UMASS campuses) all played key roles.

We never had institutional commitment or top management support. We initially flourished in benign neglect---as long as we made money with what we were doing no one seemed to care. At the peak we were netting over $3M/year in tuition and research funds at a cost of about $500,000. In the post 9-11 environment, when we could have taken advantage of the level of interest in what we were doing if we could increase our visibility in a suddenly very competitive environment, the lack of institutional support was a frustrating constraint.

CZ: What are the pre-existing conditions that you feel are necessary in order to support moving forward with trying to establish a new academic program (or programs) in crisis and disaster management?

JH: Pre-existing conditions for a good program--research active faculty with connections in both the research and practice communities, as well as potential for a reasonable number of high quality students (we were obviously at a great advantage for high quality part time and full time international students in DC).

CZ: Finally, what is the most important thing for someone to keep in mind as they enter into the process of attempting to create a program within their own university?

JH: The most important thing is to focus on a quality program with a solid basis in academic rigor and current research. Stay ahead of the evolution in practice, don't teach current practice. When I started, emergency response was a civil defense function based on outdated doctrine and supported by little or no technology. It is now a high tech, well-resourced profession. I like to think we helped in that evolution.

What's needed now is some academic support for the evolution from a response based model to one that is broadly based on risk reduction, resilience, adaptation, and sustainability. There are a lot of mediocre programs out there that give undergraduate credit for teaching doctrine and basic skills. This is not what we need for the next decade.

CZ: Would you like to add any additional comments?

JH: Mentors played a very important role in establishing and growing the Institute - I spent a lot of time early on at both the Delaware Disaster Research Center and the Colorado Hazards Center and took away a lot of knowledge and advice. Claire Rubin has been my local source of information on the disaster community....she helped set up the Institute, taught some of the early courses, and we jointly

started the Journal of Homeland Security and Emergency Management.

I also want to emphasize and acknowledge the importance of the amazing masters and doctoral students we have had -- they are now in key positions around the world: in academia (e.g. US, Korea, Turkey, Saudi Arabia, Jordan, Pakistan) and practice (e.g. FEMA, USACE, DOD, all branches of the military, UN, World Bank, Not for Profits, state and national EM directors). It's quite a network.

CZ: Thank you very much for your time and your insights - I very much appreciate your willingness to share them with us.

News

News of Members

Stephen Fortier, D.Sc. is now Visiting Scholar at George Washington University.

Successful PhD Defences

Congratulations to **Leire Labaka**, Faculty of Technology of the University of Navarra, who defended her PhD thesis *Resilience Framework for Critical Infrastructures* on July 22nd. She was awarded Summa Cum Laude. Her supervisors were professor José Mari Sarriegi and associate professor Josune Hernantes. The abstract of her thesis reads:

> The welfare of society has increased significantly in the last few decades throughout the world due to advances in many sectors such as technology, health, communication, etc. But at the same time, this has also increased our dependency towards the correct functioning of these Critical Infrastructures (CIs). Therefore, it is paramount to improve the resilience level of CIs in order to prevent crises occurrence and absorb the impact when they occur. Resilience is defined as a capacity of a system to prevent a crisis occurrence, and in case it occurs, the capacity to absorb the magnitude of the impact and recover efficiently to the normal situation. Literature presents several definitions and perspectives regarding the resilience concept. However, it lacks to provide a detailed prescription about how crisis managers can improve their CI's resilience level holistically.

> This research presents a framework that helps crisis managers to improve the resilience level of CIs. This framework provides a list of policies and sub-policies

that crisis managers should implement in their CIs to enhance the resilience level. These policies have been defined holistically taking into account internal and external stakeholders as well as covering the four resilience dimensions.

Furthermore, the influence of each resilience policy on the three resilience lifecycle stages has been determined. An implementation methodology has also been defined in order to efficiently implement this framework in practice. This implementation methodology provides the temporal order in which the policies and sub-policies should be implemented in order to achieve a high resilience level.

Sahana Internship Opportunity

This internship will suit someone who is studying Disaster or Emergency Management. You'll be working with us to conduct research around Sahana to help us continue to develop the software to meet the changing needs of experts in the field. You'll be working with a number of experts in the Sahana community who have years of experience working with disaster management organisations and delivering technology solutions as well as have access to data on the use of Sahana. We're looking for someone who will bring in fresh ideas and perspectives and determine the focus of the research in. We'll be flexible around designing this internship so that it could count towards course credit and would hope that you may be able to publish a paper coming out of it. The internship would ideally run for 4 months and the interns will receive US$ 500.

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Dagstuhl Report published

Civilian Crisis Response Models

Edited by Bernhard Katzy, and Ulrike Lechner

A report of the Dagstuhl (www.dagstuhl.de) seminar (Nº 13041) held January 20-25, 2013 on *Civilian Crisis Response Models* has be published at:
http://drops.dagstuhl.de/opus/volltexte/2013/4009/pdf/dagrep_v003_i001_p067_s13041.pdfhttp://drops.dagstuhl.de/opus/volltexte/2013/4009/pdf/dagrep_v003_i001_p067_s13041.pdf.

Abstract

This report documents the program and the outcomes of Dagstuhl Seminar 13041 "Civilian Crisis Response Models".

The vulnerability of modern societies to the threats of man made and natural disaster increases and scale and number of disasters are expected to rise. The earthquakes of Haiti with its subsequent Cholera epidemics, the natural disasters in Pakistan as well as the ongoing situation in Japan illustrate the need for effective and efficient crisis and disaster response organizations as well as humanitarian aid organizations in developing and first world countries. Disaster preparedness is a key to effectiveness and efficiency in case of crisis or disaster – but we observe that natural and human disasters are too often beyond what is being planned for.

There is a need for new and better approaches in disaster and crises response and humanitarian aid. There is a need for well designed systems as well as for models, methods, instruments and tools for analysis and decision making. This Dagstuhl Seminar is motivated by the fact that computer science is an enabler for the changes and should contribute to the body of scientific knowledge and instruments and tools alike.

The Seminar discussed approaches to Crisis Response from a variety of disciplines. In a workshop like setting with talks, panels and discussions, seminar participants worked on a common understanding of crisis and crisis response, characteristics of crisis situations and crisis response and research topics on crisis management. The participants developed on a research agenda for Networked Civilian Crisis Response Models.

Upcoming Conferences and Seminars, Journal Calls for Special Issues

ISCRAM Vietnam 2013 Conference

Hanoi, Vietnam, 30th Oct to Nov 1st, 2013

www.doesnotunderstand.org/public/ISCRAM-VN2013.html

The conference is intended for researchers and practitioners in the South-East Asia region who are working in the area of disasters and risks.

This conference will take place at the Institut de la Francophonie pour l'Informatique (IFI), Hanoi, Vietnam

Description

The aim of this 3 day conference is to bring together both researchers and practitioners in the South-East Asian region that are working on state-of-the-art crisis information systems. The conference will be a unique opportunity to exchange information and knowledge, and provide a forum for discussion of new research results, best practices and case studies. The first day of the conference is dedicated to tutorials, this will be followed by 2 days of scientific presentations

Conference topics

Topics include, but are not limited to:

- Modelling and Simulation
- Human Experiences in the Design of Crisis Response and Management Services and Systems
- Command and Control Studies
- Education and Training
- Planning, Foresight and/or Risk Analysis
- Social Media and Collaborative Systems
- Humanitarian actions
- Search & Rescue Robotics
- Geographic Information Science and Technology (GIS&T) for Crisis Response and Management
- Research Methods
- Healthcare Crisis Management Systems
- Humanitarian Challenges
- Decision Support Methods for Complex Crises
- Wireless Connectivity Management
- Inter-Organizational Exercises and Operations
- Intelligent Systems
- Wireless Sensor Networks for Emergency Response
- Early Warning and Expert Systems for Disaster Management
- Serious Games for Crisis Management

Important dates

Aug 30th	- Due date for papers submission
Sept 21st	- Final acceptance
Oct 5th	- Camera-ready paper due
Oct 30th - Nov 1st	- ISCRAM Vietnam

Find out more at:
www.doesnotunderstand.org/public/ISCRAM-VN2013.html

ISCRAM Asia 2013 and 5th EMPAT
Emergency management systems in the era of Big Data

Harbin December 15th to 17th, 2013

conference.hrbeu.edu.cn/ISCRAM-ASIA2013

The conference theme for ISCRAM-ASIA 2013 is Emergency Management Systems in the Era of Big Data. As is known to all, Big Data recently

has become a new ubiquitous term to describe large datasets that are challenging to store, search, share, visualize, and analyse. Effective management and analysis of the Big Data in emergency management theory and practice would bring great benefits for reducing the consequences of natural and human disasters. Under such circumstances, the ISCRAM-ASIA 2013 will provide an excellent opportunity to exchange information and knowledge on this theme.

The ISCRAM-ASIA 2013 vision, then, is of a conference that attracts a substantial percentage of past attendees, while reaching out to new ones, in order to strengthen the scientific contribution and practical implications of research in the ISCRAM community. The theme of the conference will not only attract people from technology of information systems, but also more people from social sciences.

ISCRAM-ASIA 2013 will provide continuity with prior ISCRAM-CHINA and ISCRAM-ASIA conferences by sustaining and further promoting the participation of disciplines with which the community has traditionally been associated, including information systems, modelling and simulation, human-computer interfaces, information and data management, decision support and intelligent systems.

The deadlines for submission of full and short papers has passed, but the deadline for doctoral student colloquium papers is September 15th, 2013.

Further details at:
conference.hrbeu.edu.cn/ISCRAM-ASIA2013

Call for Papers:
Decision Support for Resilient Societies
European Journal of Decision Processes

www.euro-online.org/web/pages/1508/special-issues

Guest Editors
    Tina Comes (University of Agder)
    Valentin Bertsch (KIT)
    Simon French (University of Warwick)
    Jutta Geldermann (University of Göttingen)

Motivation

Societies are increasingly dependent on critical infrastructures (CIs) such as energy supply, communication and transport. The interconnectedness of these infrastructures is a challenge for risk and crisis management, because the impacts of CI disruptions–which were mainly regional in the past–may now cascade across globalised networks. A further challenge is that CI failures cause disruptions in emergency management, too.

Emergency planning and analysis helps build resilient systems which are responsive and adaptable. To build resilient societies, it is necessary to understand interrelations among systems and the roles, structures, and processes through which risks can be countered. Because modern societies are interconnected, integrated approaches are needed to account for different criteria and to synthesize inputs from different disciplines. Such approaches thus improve the decision making activities of companies, policy makers, regulators and other stakeholders, including the public.

In this setting, EURO Journal on Decision Processes will publish papers on supporting decision makers to build resilient societies in the face of interdependency, complexity and uncertainty.

Contents

The Guest Editors welcome papers at the juncture of operational research, the modelling of CI systems, and rational and behavioural decision studies in crisis and emergency management:

- Modelling and simulating the economic and societal consequences of CI disruptions
- Risk management and the planning of robust and resilient systems
- Collaborative and participatory techniques of multi-criteria decision support
- Vulnerability assessment and stress testing of CIs in terms of societal and economic impacts
- Risk perception, acceptance research and prospect theory

Schedule

Prospective authors are invited to submit a full paper to the EJDP Editorial Manager as "Original Research" (https://www.editorialmanager.com/ejdp) with a reference to this Call for Papers in the field "Please enter comments". Alternatively, they may send the Guest Editors a three-page extended abstract describing the proposed contribution (email martina.comes@uia.no). The extended abstracts are due by **August 31st, 2013**, and full papers are due **by November 30th, 2013**.

Community Engagement in Research Conference: Advancing Communities' Disaster Resilience

Milwaukee, September 18, 2013

https://ctsi.mcw.edu/ai1ec_event/community-engagement-in-research-conference-advancing-communities-disaster-resilience

The Medical College of Wisconsin's Community Engagement Key Function of the Clinical & Translational Science Institute of Southeast Wisconsin in collaboration with the Department of Emergency Medicine, University of Wisconsin-Milwaukee, and the City of Milwaukee Department of Public Health are hosting a one-day conference to expand dialogue on advancing community resilience in preparation for possible future disasters which have been common in this region and state.

This conference is tailored for academic, clinical and community researchers interested in developing a local/regional/international pathway to whole community emergency preparedness. The success of the conference will also come from equal participation of a wide variety constituents, including government officials, public health professionals, community based organizations, small and large businesses, and volunteer groups. By attending the conference, participants will explore the following questions:

- What are current approaches and trends in Disaster Management practice and science?
- What are the community and academic perspectives and experiences on major local disasters and risks which can enhance a shared awareness and align for resilience during future events?
- How can existing community-academic partnerships reveal potential and existing community assets available for "in-place" preparedness and disaster/emergency response?
- What are potential next steps for establishing a "whole community disaster response"?

IROS'13 Workshop on Robots and Sensors integration in future rescue INformation system (ROSIN'13)

Tokyo, November 7th, 2013

www.doesnotunderstand.org/public/ROSIN2013.html

This full-day workshop will take place November 7th, 2013 during the 2013 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'13).

Motivation and objectives

Intelligent rescue systems including ITC and robotics technology have been proposed to mitigate disasters, especially in Japan after the 1995 Hanshin-Awaji Earthquake. Ideally, these future search and rescue systems will involve a complex mixture of humans performing high level decision-making, intelligent agents coordinating the response, sensing capabilities

to provide real-time observations and possibly mobile robots undertaking physical tasks at difficult or risky remote places in order to provide an efficient disaster response on a large-scale environment. However, there are several challenges to address before such a scenario could take place because the considered environments are prone to uncertainty, ambiguity and incompleteness given their dynamic and evolving nature. First, in the robotic domain for search and rescue most of nowadays robots are operated by humans. While this is required by the harsh conditions commonly found in disaster sites (collapsed buildings, gaps, holes, flooding ...), there are many limitations in human operated robots where the dependency on well-trained operators obviously limits the deployment of such robots. In addition, due the very limited number of available robots and their highly customized hardware (both in terms of mobility and actuation capabilities), it is necessary in a disaster recovery campaign to carefully and rapidly identify both the deployment location and the type of the robots to be deployed. Secondly, while the monitoring capability of Wireless Sensor Networks make them very suitable for large scale surveillance systems random deployment cannot guarantee coverage both for sensing and connectivity and concerns. In addition, while scalar sensors are quite easy to manage they however provide very limited information compared to what multimedia sensors could bring if video or images were available. In general, a wide range of wireless sensor network applications can be strengthened by introducing a vision capability and, in the domain of search and rescue, which is extremely mission-critical in nature, adding visual capabilities is considered to be of the utmost importance. Unfortunately, video or image sensors are much more difficult to manage on a large scale because of the more demanding resources they need for their operation and for transmitting visual information to a control centre.

Therefore the objective of this workshop is to bring together robotics and Wireless Sensor Networks researchers to:

- present both state-of-the-art results and work in progress in the area of distributed sensing in the context of robotic and sensor networks integration for search and rescue systems,
- foster multi-disciplinary collaborations between researchers working on different topics: WSN (Wireless Sensors Network), robotic, disaster management, information systems, ... thus forming a base for future collaboration.

This workshop will focus on the tight integration of sensors-robots and information systems

during the rescue process. Topics that are of special interest include but are not limited to:

- Distributed information gathering with heterogenous teams (UAS & UGV, UAS & USV, robots and sensors),
- Information systems for disaster management including Spatial Decision Support Systems (SDDS), Geographic Information Systems (GIS) and participatory GIS, adaptive software for rescue robotics,
- Advanced data management with mobile robots and sensors, GIS spatial representation for robotic systems,
- Communication and control protocols for robot-sensor interaction including coverage and maintenance of network connectivity,
- Simulation of robots and sensors,
- Role of robots and sensors in disaster and emergency management processes.

The primary audience of the proposed workshop is intended to be researchers and practitioners both from academia and industry with an interest on integration robots, sensors and information systems in the context of disaster or emergency management. In addition, researchers and practitioners from related communities (disaster management, SDDS, GIS) will find this workshop quite useful.

Sept 9th 2013 -   Due date for paper submission
Oct 1st, 2013 -   Final acceptance
Oct 15th, 2013   -   Camera-ready paper due
Nov 7th, 2013 -   Workshop date (full day)

Find out more at:
www.doesnotunderstand.org/public/ROSIN2013.html

Diary of Upcoming Events and Calls

When and Where	Event/Call	Contact
15-17 Aug 2013 Chicago, USA	AMCIS 2013 Minitrack Call for Papers: ICT-enabled Crisis, Disaster, and Catastrophe Management	http://amcis2013.aisnet.org/ http://eventseer.net/e/20383/
24-28 Aug 2014 Davos, Switzerland	5th International Disaster and Risk Conference IDRC Davos 2014	http://www.idrc.info/
18 Sept 2013 Milwaukee USA	Community Engagement in Research Conference: Advancing Communities' Disaster Resilience	https://ctsi.mcw.edu/ai1ec_event/community-engagement-in-research-conference-advancing-communities-disaster-resilience/
21–26 Oct 2013 Linköping, Sweden	IEEE International Symposium on Safety, Security, and Rescue Robotics:Cooperation and Collaboration	http://www.ssrr-conference.org/2013/
30 Oct – 1 Nov 2013 Ha Noi, Vietnam	ISCRAM Vietnam 2013 Conference	www.doesnotunderstand.org/public/ISCRAM-VN2013.html
7 Nov 2013 Tokyo, Japan	IROS'13 Workshop on Robots and Sensors integration in future rescue Information system (ROSIN'13)	www.doesnotunderstand.org/public/ROSIN2013.html
30 Nov 2013	Final submission of papers for: *European Journal of Decision Processes* special issue on *Decision Support for Resilient Societies*	www.euro-online.org/web/pages/1508/special-issues
15 – 17 Dec 2013 Harbin China	ISCRAM Asia 2013 and 5th EMPAT Emergency management systems in the era of Big Data	http://conference.hrbeu.edu.cn/ISCRAM-ASIA2013/