Call for Papers: SPECIAL ISSUE on

"IT IN DISASTER RISK REDUCTION: ISSUES AND CHALLENGES"

HTTP://SIITDRR.UNWE.BG/

Due to the effects of environmental changes, including global warming, we are facing an unexpected number of natural disasters and crises as well as their related consequences. We are also facing another era of Industrial Revolution: Information and Communication Technologies (ICT) (including artificial intelligence (AI) and social media) are becoming more popular and are coming to be used in daily life. Yet, those technologies are not yet used fully in relief activities and in response to disasters.

International differences in information technology (IT) literacy as well as in IT equity might be among the reasons for this lack of use. In this journal, these issues are looked as well from the viewpoint of the Sustainable Development Goals (SDGs) of the United Nations.

The issues in IT in disaster risk reduction are of a multi-disciplinary nature and include various aspects of research areas such as information systems; IT; natural disaster sciences such as meteorology, social media, risk management, education, psychology and economics; and practical and strategic issues such as disaster management and policy making.

The aim of this special issue is to promote this multi-disciplinary area of research and development, and to encourage researchers and practitioners who work on information systems to look into disaster management as a promising application for various technologies.

By taking such perspectives, the International Federation for Information Processing (IFIP) set up the Domain Committee on IT in Disaster Risk Reduction (ITDRR) to promote this exciting area of research and development. The committee has held its annual workshop and conferences since 2016. We welcome papers based on the results from those events as well as other original sources.

Due to disaster risk reduction's multidisciplinary nature, authors from various backgrounds - such as industry, diverse geographical and global settings, not-for-profit organisation backgrounds, agriculture, marine life, welfare, risk management, safety engineering and social networking services - will be included in this special issue.

TOPICS

The editors of this special issue solicit the submission of high-quality research papers concerning (but are not limited to) the following areas:

- ✓ advanced ICT including AI, big data, internet of things (IoT) and Unmanned Aerial Vehicles (UAV) for disaster management
- ✓ climate informatics
- ✓ cloud computing and mobile computing in emergency management
- ✓ crowdsourcing and social media for emergency management
- ✓ disaster communications
- ✓ disaster information processing
- ✓ disaster relief, resilience and research
- ✓ disaster risk management capability assessment
- ✓ emergency preparedness
- ✓ risk management and risk governance
- ✓ disaster monitoring
- ✓ hazard and vulnerability analysis
- ✓ security and privacy issues in disaster management
- ✓ simulation and gaming for disaster management

✓ state-of-the art in the command and control room

We invite high-quality research papers which have neither been published previously nor are currently under consideration for publication in any other journal or conference. Survey papers of superior quality are also invited in this area.

SUBMISSION INSTRUCTION

Paper submissions must conform to the format guidelines of Information Systems Frontiers available at: http://www.springer.com/business/business+information+systems/journal.

Submissions should be approximately 32 pages double spaced including references.

IMPORTANT DATES

Submission deadline: **March 30, 2020 (extended)** ~~February 29, 2020~~
Notification of first round reviews: **June 15, 2020** ~~May 15, 2020~~
Revised Manuscripts due**: July 30, 2020**, ~~July 10, 2020~~
Second Round Notification: **September 18, 2020**
Final Version Due: **October 27, 2020**
Final Acceptance Notification: **November 20, 2020**

SPECIAL ISSUE EDITORS

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Yuko Murayama is a researcher at Institute for Mathematics and Computer Science, Tsuda University, as well as Professor Emeritus at Iwate Prefectural University, Japan. Her research interests include internet, network security, security, trust, anshin, and disaster information processing. She had a B.Sc. in Mathematics from Tsuda College, Japan in 1973 and had been in industry in Japan. She had M.Sc. and Ph.D. both from University of London (attended University College London) in 1984 and 1992 respectively. She had been a visiting lecturer from 1992 to 1994 at Keio University, and a lecturer at Hiroshima City University from 1994 to 1998. She was with Iwate Prefectural University from 1998 to 2016. She was a professor at Tsuda University from 2016 to 2019. She is one of the IFIP Vice Presidents. She served as the chair of IFIP Domain Committee on IT in Disaster Risk Reduction from 2016-2019. She is an IPSJ fellow and a senior life member of IEEE, as well as a member of ACM, IPSJ and IEICE.

Hans Jochen Scholl serves as a Full Professor in the Information School at the University of Washington, Seattle, WA. He earned a Ph.D. in Information Science from the University at Albany, State University of New York, and also holds a Master's degree in Business Administration from the GSBA Zurich, Switzerland. His research

interests focus on understanding human-originated complex systems. He employs quantitative and qualitative approaches ranging from System Dynamics to Situational Action Analysis and Action Research among other methods. Areas of study include information management, in general, and Digital Government, disaster studies (Disaster Information Management), information artifact evaluation, and pro sports information management, in particular. Jochen is a past president of the Digital Government Society, of which he was a founding member. He also serves as Past Chair of the IFIP WG 8.5 (IS and Public Administration) and as Board Member of the International Association for Information Systems for Crisis Response and Management (ISCRAM organization). With help of iSchool graduate assistants he also maintains and publishes the Digital Government Reference Library (DGRL) and the Disaster Information Reference Library (DIRL). Furthermore, Jochen serves as co-chair of the renowned Digital Government Track at HICSS as well as Associate Editor and Editorial Board Member on a number of leading journals.

Professor Dr. Dimiter Velev is with the Department of Information Technologies and Communications at the University of National and World Economy (UNWE), Sofia, Bulgaria and he is the Director of the Science Research Center for Disaster Risk Reduction at UNWE.

Prof. Velev holds a M.Sc. degree in Electro-Engineering from the Sofia Technical University, Bulgaria and a Ph.D. degree in Computer systems, Complexes, Systems and Networks from the Pukhov Institute for Modelling in Energy Engineering at the National Academy of Sciences of Ukraine.

Prof. Velev's main areas of academic and R&D interest are Modeling and Development of Internet-Based Business Systems, Cloud Computing, Online Social Networks, Artificial Intelligence, Integrated Information Systems for Management of Natural Disasters.

He is a regular chair and a keynote speaker of conferences in Asia and Europe and a reviewer of many scientific publications in journals and conferences. He has published more than 185 ICT-related papers.

Prof. Velev is a member of the International Federation for Information Processing (IFIP), http://ifip.org/ , in which he is the Vice-chair of IFIP Domain Committee on Cloud Computing; the Vice-chair of IFIP TC5 New Activities and Interdisciplinary Research; and the Secretary of IFIP Domain Committee on Information Technology in Disaster Risk Reduction.