PROGRAM

ISESS 2017

The ISESS conference series

The International Symposium on Environmental Software Systems was initiated in 1995 as a forum to present and discuss the fundamentals, progress and trends in this area in terms of methods, tools and state-of-the-art environmental informatics applications. Over the years, it has also evolved into an important networking opportunity for academics, environmental professionals, and other interested parties. ISESS brings together researchers and practitioners dealing with environmental challenges and trying to provide solutions using forward-looking and leading-edge IT technology.

ISESS is organised by Working Group WG5.11 *Computers and Environment* of the *International Federation for Information Processing* (IFIP).

Conference proceedings

Accepted papers will be published in IFIP AICT by Springer publishers, indexed by SCOPUS and ISI.

The conference proceedings are published (approximately 10 weeks) after the meeting, and will be available with Springer Scientific Publishers in a variety of media. Participants will receive electronic pre-prints and the final electronic version of the proceedings.

An overview of all ISESS publications is available at www.enviromatics.org.

Conference topics

Environmental modelling and
decision making processes

Computational and data-intensive methods in
environmental and earth system science

Linked data and semantics
in environmental informatics

Integrating ground and remote sensing data
for environmental modelling

Landscape surface process modelling
and data assimilation

Integrating modelling and sensor networks for
environmental management

Geospatial earth observation data cube

National and trans-national environmental
data facilities, services and standards

Big data technologies in
the environmental domain

Environmental applications for
crises and disaster management

Benchmarking systems and methods
for environmental models

General papers on
environmental software systems

Important links

www.isess2017.org
www.ifipwg511.org
www.ifip.org

Registration

Please register soon to obtain the special hotel rates negotiated with the Falkersteiner hotel. See details at www.isess2017.org.

Preliminary program

Nigel W. Quinn (US) *Web-based Decision Support for Stakeholder Implementation of Real-time, Basin-scale Salinity Management (Keynote)*

Stefan Jensen (DK) *Trends in policy relevant European Environmental information systems (Keynote)*

Jaroslav Pokorny (CZ) *Big Data Storage and Management: Challenges and Opportunities (Keynote)*

Peter Fischer (DE) *Software systems in national park monitoring and management (Keynote)*

Thorsten Schlachter (DE), *A Generic Web Cache Infrastructure for the Provision of Multifarious Environmental Data*

Jorn Baayen (NL), *Control and optimization of environmental systems using RTC-Tools 2.0*

Nicholas Car (AU), *netCDF-LD SKOS: demonstrating Linked Data vocabulary use within netCDF-compliant files*

Jakub Gregor (CZ), *GMP Data Warehouse – a Supporting Tool of Effectiveness Evaluation of the Stockholm Convention on Persistent Organic Pollutants*

Nikos Katsifarakis (GR), *A new feature selection methodology for environmental modelling support: the case of Thessaloniki Air Quality*

Sacha Gobeyn (BE), *The use of adaptive genetic algorithms with local hill climbing to optimise species distribution models*

Eric Braun (DE), *3D Volume Visualization of Environmental Data in the Web*

Clemens Düpmeier (DE), *A Generic Microservice Architecture for Environmental Data Management*

Katharina Schleidt (AT), *Evolution of Environmental Information Models - URI-Properties*

Ulrich Meissen (DE), *Integration of volunteers in disaster management*

Ari Jolma (FI), *Information System as a Tool for Marine Spatial Planning: the SmartSea vision*

Simon Burkard (DE), *Mobile Location-based Augmented Reality Framework*

Mert Gencturk (TR), *Achieving Semantic Interoperability in Emergency Management Domain*

Simon Burkard (DE), *Flood forecasting system in small drainage areas with mobile crowd tasking and mobile sensing*

Ioannis N. Athanasiadis (NL), *How to effectively start an interdisciplinary project*

Matti Heikkurinen (DE), *UNISDR Global Assessment Report - Current and Emerging Data and Compute Challenges*

Peter Khaiter (CA), *Designing a software tool for environmental modelling and decision making in managing of invasive species*

Gerald Schimak (AT), *C2-SENSE – Pilot Scenario for Interoperability testing in Command & Control Systems for crises and disaster management: Apulia example*

Asaf Nebenzal (IL), *Hough-based Interpolation Scheme for Generating Accurate Dense Spatial Maps of Air Pollutants from Sparse Sensing*

Petr Fiala (CZ), *Environmental modelling with reverse combinatorial auctions: CRAB software modification for sensitivity analysis*

Tomas Reznik (CZ), *FOODIE Platform: Open Information System Supporting Ecological and Economical Tasks*

Gerhard Dünnebeil (AT), *Approaches to Fuse Fixed and Mobile Air Quality Sensors*

Lukas Herman (CZ), *Flood Modelling and Visualizations of Floods through 3D Open Data*

Jan Luhan (CZ), *The Dynamic Model of E-Government System Development*

Refiz Duro (AT), *Interoperable Framework for Managing Environmental Crises and Disasters*

Kamil Nesetril (CZ), *Concepts of Business Intelligence for Groundwater Data*

Kenneth Bryden (US), *A Domain Specific Language to Simplify the Creation of Large Scale Federated Model Sets*

Nigel W. Quinn (US), *Projecting Future Irrigated Agriculture Under Saline Conditions Using the Hydro-Salinity, Crop Production Optimization Model APSIDE*

Karel Charvat (CZ), *SensLog Platform – solution for sensors and citizens observatories*

Jiri Hrebicek (CZ), *Modelling and forecasting waste generation – DECWASTE information system*

Miroslav Kadlec (CZ), *An Opportunity to Employ Planning and Scheduling for Optimizing Communication in Smart Grids*

Adam Kucera (CZ), *Semantic BMS: Ontology for Analysis of Building Operation Efficiency*

Zohair Sabeur (UK), *Large Scale Surveillance, Detection and Alerts Information Management at Critical Infrastructure*

Zohair Sabeur (UK), *An Integrated Decision-Support Information System on the Impact of Extreme Natural hazards on Critical Infrastructure*

Zohair Sabeur (UK), *EO Big Data Connectors and Analytics for understanding the effects of climate change on migratory trends of marine wildlife*

Hermann Heich (DE), *Business model development for urban air quality forecasting*

Martin Komenda (CZ), *A Pilot Interactive Data Viewer for Cancer Epidemiology*