i-KNOW 2014 / workshop
14th International Conference on Knowledge Technologies and Data-driven Business
16-19 September 2014, Graz, Austria *i-know.tugraz.at*

Dirty time-oriented data: whereabouts and bottlenecks

An interdisciplinary and interactive session on the handling of imperfect time-stamped information sets

16-17 September 2014

Call for papers
Submission deadline extended: May 15, 2014

Context and motivation

In a number of application fields, pieces of data and information need to be modelled and visualised so as to analyse patterns of change over time, or so as to pinpoint time-related causal chains. Briefly said, understanding facts often implies understanding processes that lead to facts, or that derive from facts – and reasoning on processes implies mastering the time parameter.

However, coping with **dirty** time-oriented data (inaccurate, incomplete, erroneous, contradictory, etc.) remains, by and large, an open issue. If scientists and practitioners are to foster the emergence of effective solutions, it is of great importance they get an opportunity to confront their approaches, ideas, experiences and methods.

The workshop's ambition is to foster interdisciplinary scientific exchanges both on theoretical or technological aspects and on practical cases/feedbacks stemming from a wide range of application fields.

Topics of interest

Handling "dirty" time-oriented data is naturally a key issue in human sciences, yet the issue is more generally raised in all activities where unreliable and/or incomplete and/or inaccurate temporal data sets have to be dealt with. The workshop wishes to host contributions covering a wide range of application fields, of scientific practices, and of theoretical or methodological approaches (historical sciences, environmental sciences, geosciences, conceptual modelling, health sciences, monitoring and planning activities, etc.). Accordingly, we welcome submissions related to (but not limited to) the handling of imperfect time-stamped information sets in the following research areas:

Knowledge Representation, Visual Analytics & Information Visualisation

• Temporal knowledge discovery, databases.
• Temporal logic, temporal representation and reasoning.
• Uncertainty modelling, data and information quality.
• Information visualisation, visual representations and interaction techniques.
• Visualisation of temporal or spatio-temporal data.
• Process and workflow visualisation.

Geosciences

• Geovisualisation, geovisual analytics.
• Simulation, multi-agent systems.
• Geography, geomatics, time geography, mobility, flows, etc.
• Urban planning, landscape analysis & monitoring, etc.
• Risk assessment, climate research.

Historical Sciences, Health Sciences, Social Sciences

• Archaeology, environmental archaeology, paleoethnobotany.
• Ethnology, ethnography, linguistics, etc.
• History, history of art and architecture, etc.
• ITC in health services.
• Intelligence, social networks, etc.
• Business intelligence.

www.map.archi.fr/dirtytime   *dirtytime@map.archi.fr*

Deadlines EXTENDED
- Submission deadline: May 15, 2014
- Notifications: May 26, 2014
- Camera-ready version: June 7, 2014
- Workshop 16-17 September 2014

Location
Graz, Austria, (Messe Congress Graz , <ww.mcg.at/en>);
in conjunction with i-KNOW 2014 , Graz University of Technology, Know Center

Submissions
Submissions are invited on the above topics, either as short papers (4 pages) - position papers, test cases - or as regular contributions (8 pages). Submissions will be reviewed by the workshop's Programme Committee in an interdisciplinary approach (cross-examination from the application field point of view and from a KR perspective). All selected papers will be published in the workshop notes, either in conjunction with the conference proceedings or online as part of an Open Access peer-reviewed journal. Submissions will be handled electronically - formatting guidelines here : <www.map.archi.fr/dirtytime>.

Event format and expected outcomes:
The event will combine a "traditional" workshop format - keynotes focusing on dirty time-oriented data as such and talks focusing either on theoretical or technological aspects or on feedbacks from a variety of application fields - and a collective initiative aimed at pulling together test cases and resources (interdisciplinary references on one hand, and on the other hand test benches freely usable by the community in its subsequent work). Expected outcomes of this workshop accordingly include a better acquaintance with relevant work across scientific domains and application fields as well as the emergence of ad-hoc metrics – an attempt to ease the task of cross-examining responses to data quality issues.
Ultimately, the initiative wishes to contribute to the strengthening of the community of analysts dealing with quality issues in the context of temporal data and information sets.

Programme Committee

F. Bertoncello - CNRS, France

A. Bertone -Technical University Dresden, Germany

P. Buono - University of Bari, Italy

P.A. Davoine – University of Grenoble, France

J. Kehrer - Vienna University of Technology, Austria

C. Kinkeldey - HafenCity University Hamburg, Germany

O. Klein - CEPS, Luxembourg

E. Leclercq – University of Burgundy, France

J. Ma - University of Greenwich, United Kingdom

N. Mahmood- KICT, IIU, Malaysia

H. Mathian – CNRS, France

K. Matoušek - Czech Technical University, Czech Republic

T. Nocke - Potsdam Institute for Climate Research, Germany

D. O'Sullivan - University of California, Berkeley, USA

T. Pellegrini - St. Poelten University of Applied Sciences, Austria

A. Raffaetà - University of Venice, Italy

C. Renso - CNR, Italy

V. Sabol – TU Graz, Know-Center, Austria

H. Senaratne - University of Konstanz, Germany

C. Stasch - University of Muenster, Germany

M. Streit - JKU Linz, Austria

Organisers

W. Aigner, St. Poelten University of Applied Sciences, Austria

J.Y. Blaise, I. Dudek, CNRS (UMR 3495 CNRS/MCC MAP), France

T. Gschwandtner, Vienna University of Technology, Austria

www.map.archi.fr/dirtytime   *dirtytime@map.archi.fr*