26 - 28 September, Pensacola, FL, USA

20th International Symposium on Temporal Representation and Reasoning
http://software.imdea.org/time13/

(TIME 13) aims to bring together researchers from distinct research areas involving the management of temporal data as well as the reasoning about temporal aspects of information.
This unique and well-established event (see http://time.dico.unimi.it) has as its objectives to bridge theoretical and applied research, as well as to serve as an interdisciplinary forum for exchange among researchers from the areas of artificial intelligence, database management, logic and verification, and beyond.

Important Dates

Abstract submission: 27 April 2013
Paper submission: 30 April 2013
Paper Notification: 29 May 2013
Final version due: 12 June 2013
Early Registration: until 16 June 2013
Registration: 22 June - 26 August 2013
Late Registration: from 26 August 2013
TIME Symposium: 26-28 September 2011

Invited Speakers

- James Allen, IHMC and University of Rochester, USA
- Aaron R. Bradley, CU Boulder, USA

Submissions

Submissions of high quality papers describing research results or on-going work are solicited. Submitted papers should contain original, previously unpublished content, should be written in English, and must not be simultaneously submitted for publication elsewhere. Submitted papers will be refereed by at least three reviewers for quality, correctness, originality, and relevance. Accepted papers will be presented at the symposium and included in the proceedings, which will be published by the Conference Publishing Services (CPS). Acceptance of a paper is contingent on one author presenting the paper at the symposium.
Submissions should be in PDF format (with the necessary fonts embedded). They must be formatted according to the IEEE guidelines and must not exceed 8

pages; over-length submissions may be rejected without review. Papers should be submitted electronically via the EasyChair system at https://www.easychair.org/conferences/?conf=time13.

Topics

The symposium will encompass:
--three tracks on AI, Databases, Logic and Verification and
--an additional special track on Temporal Data Mining, OLAP and Data Warehouses

Temporal Representation and Reasoning in AI includes, but is not limited to:

temporal aspects of agent- and policy-based systems
spatial and temporal reasoning
reasoning about actions and change
planning and planning languages
ontologies of time and space-time
belief and uncertainty in temporal knowledge
temporal learning and discovery
time in problem solving (e.g. diagnosis, scheduling)
time in human-machine interaction
temporal information extraction
time in natural language processing
spatio-temporal knowledge representation systems
spatio-temporal ontologies for the semantic web
constraint-based temporal reasoning
temporal preferences

Temporal Database Management includes, but is not limited to:

temporal data models and query languages
temporal query processing and indexing
temporal data mining
time series data management
stream data management
spatio-temporal data management, including moving objects
data currency and expiration
indeterminate and imprecise temporal data
temporal constraints
temporal aspects of workflow and ECA systems
real-time databases
time-dependent security policies

privacy in temporal and spatio-temporal data
temporal aspects of multimedia databases
temporal aspects of e-services and web applications
temporal aspects of distributed systems
novel applications of temporal database management
experiences with real applications

Temporal Logic and Verification in Computer Science includes, but is not limited to:

specification and verification of systems
verification of web applications
synthesis and execution
model checking algorithms
verification of infinite-state systems
reasoning about transition systems
temporal architectures
temporal logics for distributed systems
temporal logics of knowledge
hybrid systems and real-time logics
tools and practical systems
temporal issues in security

Special Track On Temporal Data Mining, OLAP And Data Warehouses

This year, TIME has an additional special track on Temporal Data Mining, OLAP, and Data Warehouses and organized by Carlo Combi. Submissions for the special track will be primarily managed by him, though the final decision on acceptance will be taken by the whole PC.

Exploring and mining huge amounts of time-oriented data is an acknowledged need in several domains; Such a need poses several challenges calling theoretical and practical research. Several research topics underly the study of solutions allowing users to explore and mine time oriented data: from the modeling of multidimensional temporal data, to the efficient storage and retrieval of time-series and temporal data, to the definition of algorithms for data mining, and so on. Moreover, several application domains could benefit from advancements of such kind of research: among them, it is worth to mention here medicine, huge amounts of time-oriented data are daily produced and need to be analyzed/mined to improve the overall quality of healthcare processes.

High quality contributions for the special track are welcome in, but are not limited to, any of the following sub-areas of research:

- Temporal data warehouses
- Modeling and querying multidimensional temporal data
- Conceptual modeling of multidimensional temporal data and processes
-Indexing temporal and spatio-temporal data warehouses
- Summarization of time-oriented data
- Mining algorithms for temporal data
- Temporal association rules
- Temporal OLAP
- ETL and temporal data
- Reconciled temporal databases
- Merging multiple and heterogeneous time-oriented databases
- Design and implementation of temporal OLAP systems
- Process mining and exploration
- Temporal data mining in medicine
- Temporal healthcare data warehouses
- Time series analysis and mining
- Temporal pattern discovery
- Visual OLAP for temporal data
- Semistructured temporal data warehouses

Symposium Chairs:

Cesar Sanchez, IMDEA Software Institute and CSIC, Spain
K. Brent Venable, Tulane University and IHMC, USA
Esteban Zimanyi, Universite Libre de Bruxelles, Belgium