

TIME 2022

29th International Symposium on Temporal Representation and Reasoning

7-9 November 2022

Online: <http://time22.time-symposium.org>



Programme Committee Chairs



Alexander Artikis
University of Piraeus
NCSR Demokritos



Roberto Posenato
University of Verona



Stefano Tonetta
Fondazione Bruno Kessler

Program at a Glance

Mon, 7 November	Tue, 8 November	Wed, 9 November
14:30 – 15:30 Invited Talk 1	14:30 – 15:30 Invited Talk 2	14:30 – 15:30 Invited Talk 3
15:50 – 16:40 Run-Time Verification	15:50 – 16:40 Extensions of LTL and Reasoning	15:50 – 16:40 Neuro-Symbolic Reasoning
17:00 – 17:50 Timed Temporal Logics	17:00 – 17:50 Interval Temporal Logics	17:00 – 17:50 Time in Artificial Intelligence

Program

<https://time22.time-symposium.org/#program>

Monday, 07 November 2022

14:15 - 14:30	Opening	
14:30 - 15:30	Invited talk: Moshe Vardi	Linear Temporal Logic: From Infinite to Finite Horizon
15:30 - 15:50	Coffee Break	
Runtime Verification		
<i>Session Chair:</i> Ničković Dejan		
15:50 - 16:40	15:50 - 16:15 I. Mackey , R. Chimni , J. Su	Early Detection of Temporal Constraint Violations
	16:15 - 16:40 V. Roussanally , Y. Falcone	Decentralised Runtime Verification of Timed Regular Expressions
16:40 - 17:00	Coffee Break	
Timed Temporal Logics		
<i>Session Chair:</i> Paritosh Pandya		
17:00 - 17:50	17:00 - 17:25 F. Bruse , M. Lange , E. Lozes	The Tail-Recursive Fragment of Timed Recursive CTL
	17:25 - 17:50 T. Guyet , N. Markey	Logical forms of chronicles

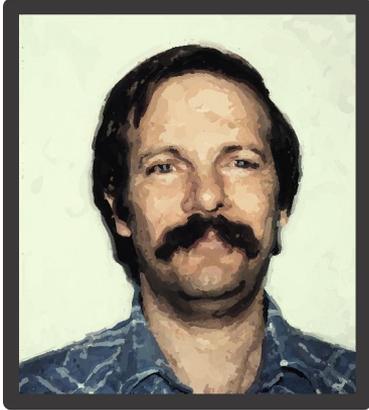
Tuesday, 08 November 2022

14:30 - 15:30	Invited talk: Silvia Miksch	Visual Analytics Meets Temporal Reasoning: Challenges and Opportunities
15:30 - 15:50	Coffee Break	
Extensions of LTL and Reasoning		
<i>Session Chair:</i> Stéphane Demri		
15:50 - 16:40	15:50 - 16:15 A. Bhaskar , M. Praveen	Realizability Problem for Constraint LTL
	16:15 - 16:40 N. Peltier	Reasoning on Dynamic Transformations of Symbolic Heaps
16:40 - 17:00	Coffee Break	
Interval Temporal Logics		
<i>Session Chair:</i> Martin Lange		
17:00 - 17:50	17:00 - 17:25 D. Guelev	Gabbay Separation for the Duration Calculus
	17:25 - 17:50 L. Bozzelli , A. Peron	A quantitative extension of Interval Temporal Logic over infinite words

Wednesday, 09 November 2022

14:30 - 15:30	Invited talk: Stijn Vansumeren	Getting to the CORE of Complex Event Recognition
15:30 - 15:50	Coffee Break	
Neuro-Symbolic Reasoning		
<i>Session Chair:</i> Nikos Katzouris		
15:50 - 16:40	15:50 - 16:15 G. Apriceno , A. Passerini , L. Serafini	A neuro-symbolic approach for real-world event recognition from weak supervision
	16:15 - 16:40 G. Pagliarini , S. Scaboro , G. Serra , G. Sciavicco , I. E. Stan	Neural-Symbolic Temporal Decision Trees for Multivariate Time Series Classification
16:40 - 17:00	Coffee Break	
Time in Artificial Intelligence		
<i>Session Chair:</i> Carlo Combi		
17:00 - 17:50	17:00 - 17:25 M. Benerecetti , F. Mogavero , A. Peron	Taming Strategy Logic: Non-Recurrent Fragments
	17:25 - 17:50 J. Gutierrez , S. Kraus , G. Perelli , M. Wooldridge	Giving Instructions in Linear Temporal Logic

Keynote Speakers



Moshe Y. Vardi
Rice University

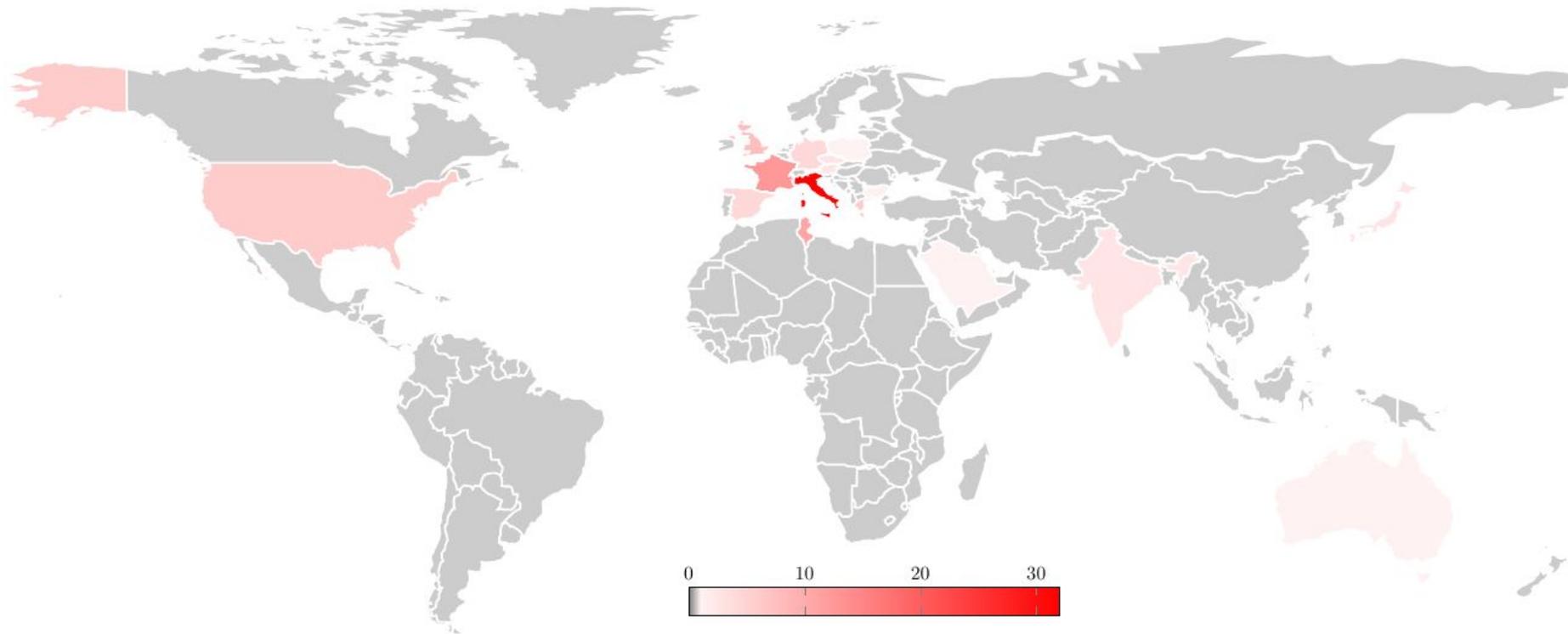


Silvia Miksch
TU Wien



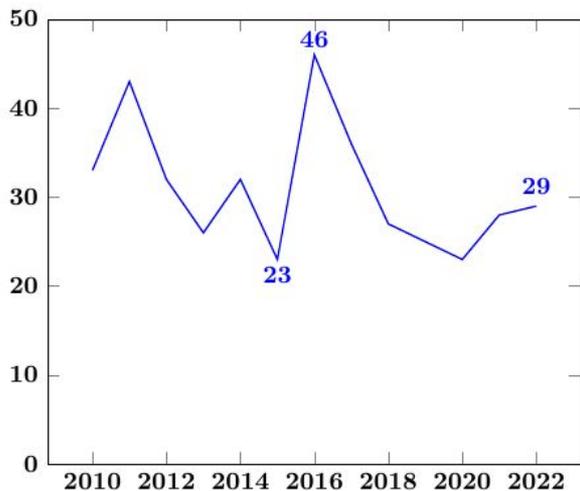
Stijn Vansummeren
University of Hasselt

Submissions

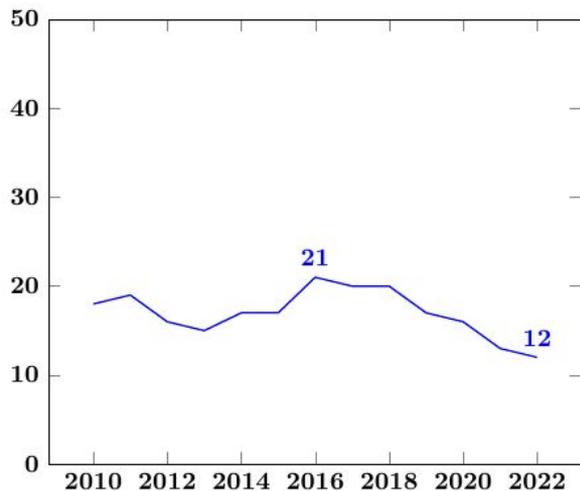


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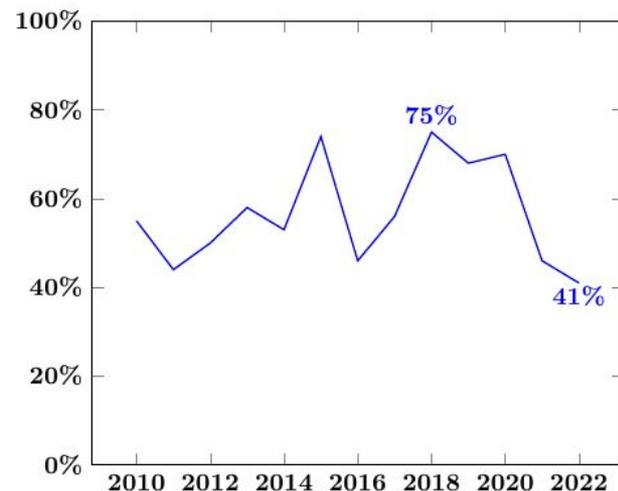
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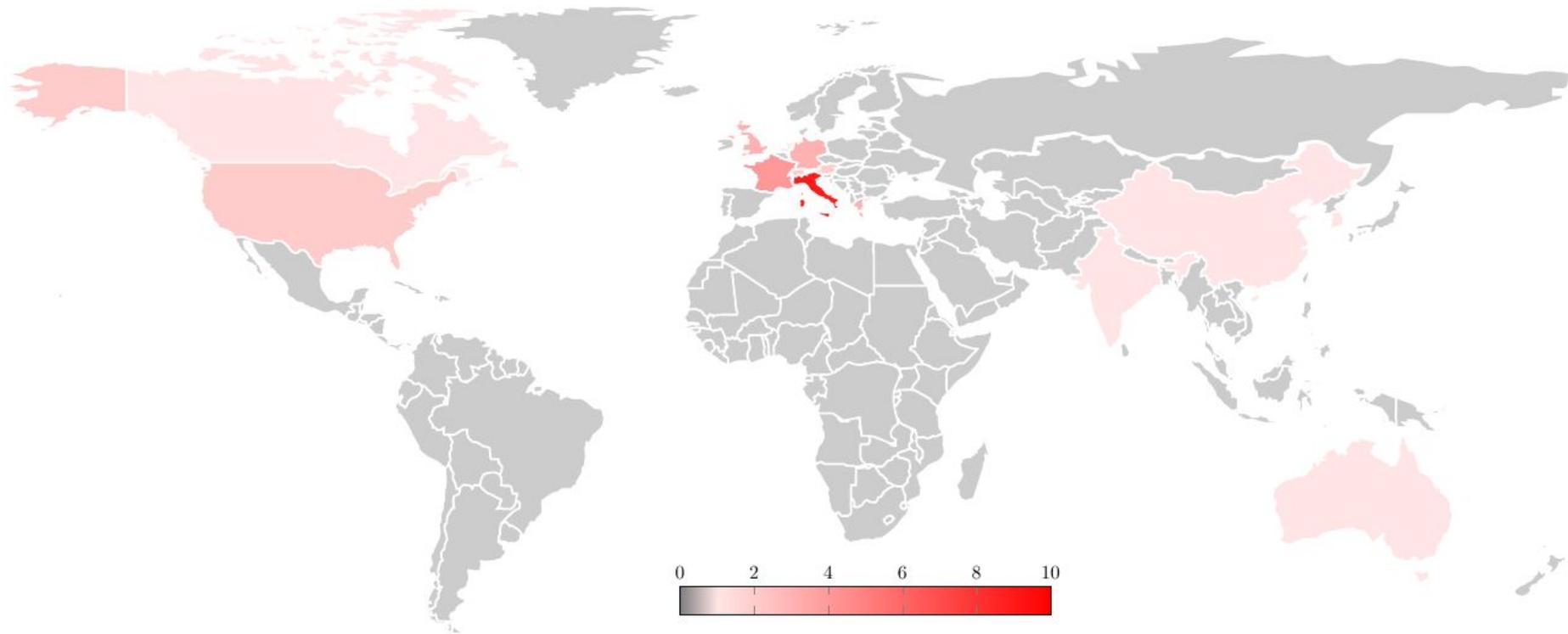
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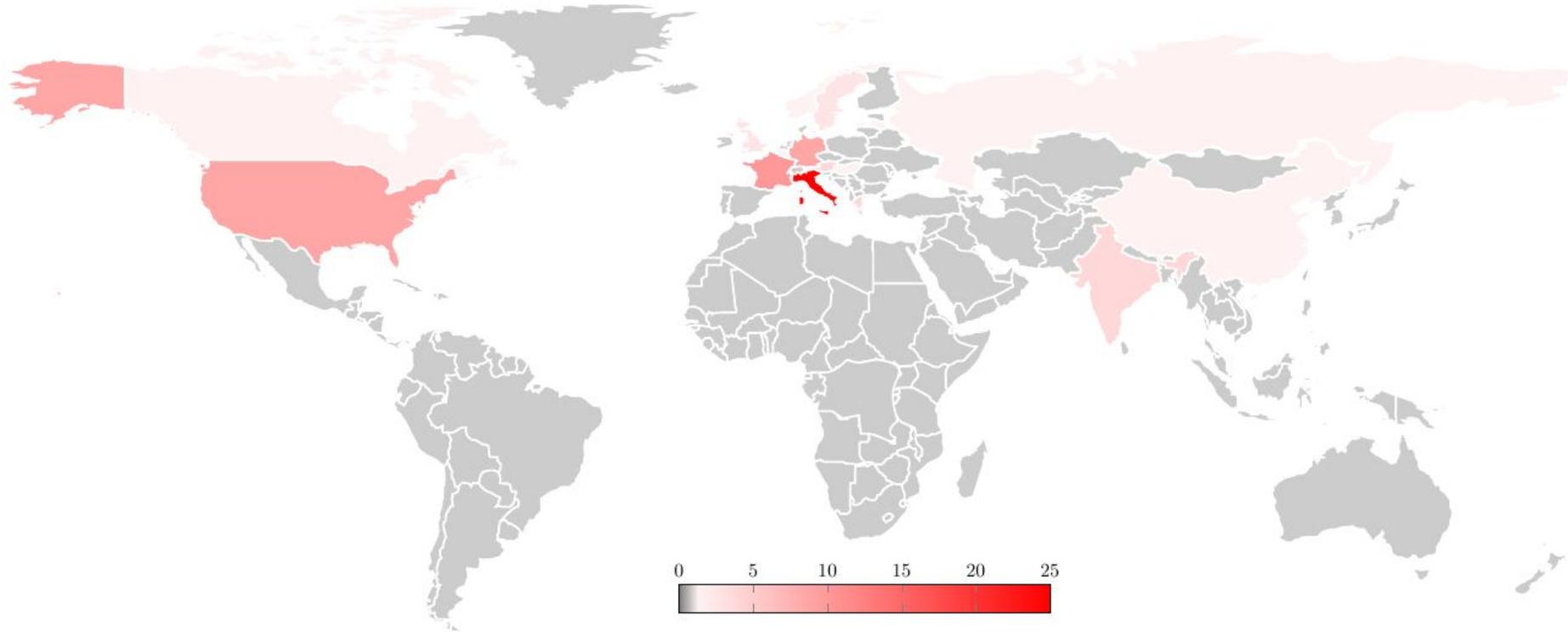
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Proceedings



TIME 2022

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Alexander Artikis and Roberto Posenato and Stefano Tonetta (Eds.)

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- Artikis, Alexander
- Benerecetti, Massimo
- Bhaskar, Ashwin
- Bozzelli, Laura
- Bruse, Florian
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- Scaboro, Simone
- Sciacivico, Guido
- Serafini, Luciano

Front Matter, Table of Contents, Preface, Conference Organization

Authors: Artikis, Alexander ; Posenato, Roberto ; Tonetta, Stefano

Abstract | Document (501 KB) | BibTeX

Linear Temporal Logic: From Infinite to Finite Horizon (Invited Talk)

Authors: Vardi, Moshe Y.

Abstract | Document (345 KB) | BibTeX

Visual Analytics Meets Temporal Reasoning: Challenges and Opportunities (Invited Talk)

Authors: Miksch, Silvia

Abstract | Document (359 KB) | BibTeX

Getting to the CORE of Complex Event Recognition (Invited Talk)

Authors: Vansummeren, Stijn

Abstract | Document (432 KB) | BibTeX

Early Detection of Temporal Constraint Violations

Authors: Mackey, Isaac ; Chimni, Raghubir ; Su, Jianwen

Abstract | Document (971 KB) | BibTeX

The Tail-Recursive Fragment of Timed Recursive CTL

Authors: Bruse, Florian ; Lange, Martin ; Lozes, Etienne

Abstract | Document (774 KB) | BibTeX

Decentralised Runtime Verification of Timed Regular Expressions

Authors: Roussanaly, Victor ; Falcone, Yliès

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- Nicolas Peltier:

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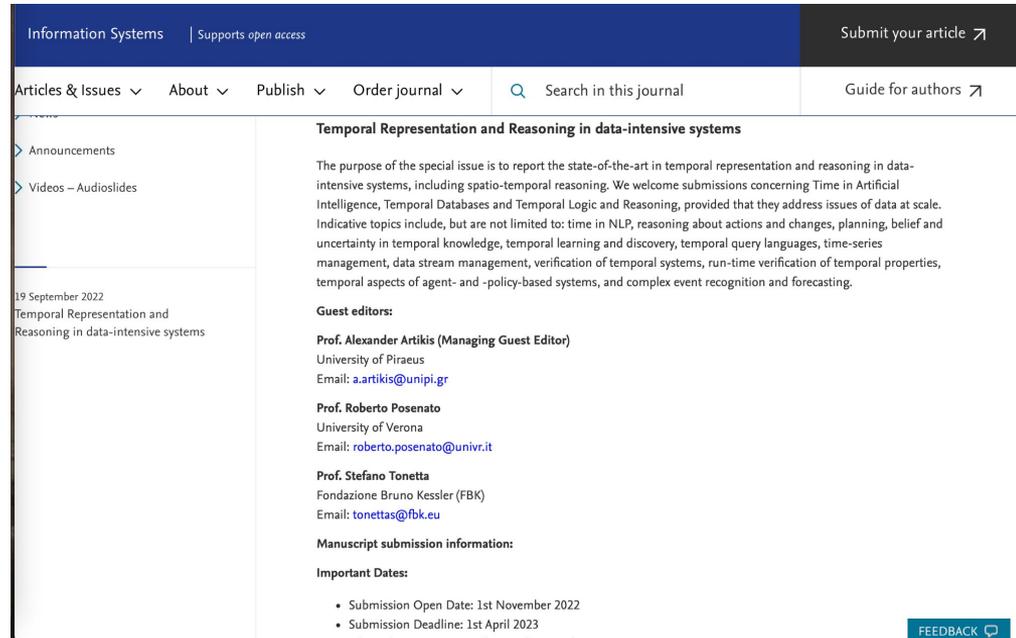
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19 September 2022

Temporal Representation and Reasoning in data-intensive systems

Temporal Representation and Reasoning in data-intensive systems

The purpose of the special issue is to report the state-of-the-art in temporal representation and reasoning in data-intensive systems, including spatio-temporal reasoning. We welcome submissions concerning Time in Artificial Intelligence, Temporal Databases and Temporal Logic and Reasoning, provided that they address issues of data at scale. Indicative topics include, but are not limited to: time in NLP, reasoning about actions and changes, planning, belief and uncertainty in temporal knowledge, temporal learning and discovery, temporal query languages, time-series management, data stream management, verification of temporal systems, run-time verification of temporal properties, temporal aspects of agent- and -policy-based systems, and complex event recognition and forecasting.

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Manuscript submission information:

Important Dates:

- Submission Open Date: 1st November 2022
- Submission Deadline: 1st April 2023

[FEEDBACK](#) 🗨

- Information Systems: Temporal Representation and Reasoning in Data-Intensive Systems. ([url](#))
- **Open call: Deadline 1 April 2023.**

Thanks to ...

- All authors, for their valuable contributions.
- PC members, for their detailed reviews and comments.
- SC members, for their guidance.
- All attendees, for making TIME 2022 a great event!
- Our sponsor:

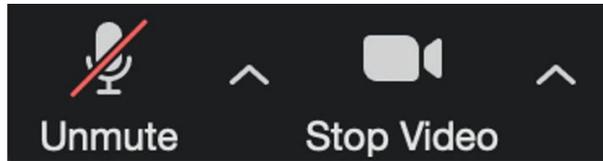


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