

ISTM 2023

SECOND INTERNATIONAL SYMPOSIUM ON THE TSETLIN MACHINE

@NEWCASTLE, UK | 26-27 JUNE 2023

<https://istm.no>

CALL FOR PAPERS

The emerging paradigm of Tsetlin machines makes a fundamental shift from arithmetic-based to logic-based machine learning. At the core, finite-state machines, based on learning automata, learn patterns using logical clauses, and these constitute a global description of the task learnt. In this way, the Tsetlin machine introduces the concept of logical interpretable learning, where both the learned model and the process of learning are easy to follow and explain. As a result, it reduces the expertise needed to apply ML techniques efficiently in various domains. The paradigm has enabled competitive accuracy, scalability, memory footprint, inference speed, and energy consumption across diverse tasks, including classification, convolution, regression, natural language processing (NLP), and speech understanding.

Organizers

General Co-Chairs

- Rishad Shafik
Newcastle University, UK
- Vladimir Zadorozhny
University of Pittsburg, USA

Program Co-Chairs

- Domenico Balsamo
Newcastle University, UK
- Lei Jiao
University of Agder, Norway

Local Arrangement Co-Chairs

- Domenico Balsamo
Newcastle University, UK
- Elisabeth Rasmussen
University of Agder, Norway
- Rishad Shafik
Newcastle University, UK

Publication Chair

- Farhad Merchant
Newcastle University, UK

Publicity Chair

- Pål Grandal
University of Agder, Norway

Topics of Interest

- Tsetlin Machines
- Learning automata
- Novel AI Algorithms
- Explainable and Interpretable AI
- Energy-efficient AI Systems Design
- New AI Applications
- Intelligent Data Preprocessing

Important Dates

- *Paper Submission:*
March 3, 2023, UTC-12 (AoE timezone)
- *Notification:*
April 28, 2023
- *Camera-ready:*
May 26, 2023

SPONSORS:



UiA



University of
Pittsburgh



IEEE