

AALTD 22



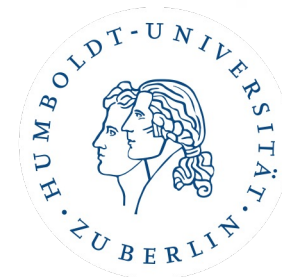
7th Workshop on Advanced Analytics and Learning on Temporal Data

September 23, 2022

Organisation Committee: T. Bagnall, T. Guyet, G. Ifrim, V. Lemaire, S. Malinowski, P. Schäfer



HUMBOLDT-
UNIVERSITÄT
ZU BERLIN



AALTD 22: Outline

- This year's edition is hybrid (finally!)
- 22 abstracts and 19 papers submitted
 - 6 accepted for oral presentation
 - 7 accepted for poster presentation
- Invited speaker:
[Causal Discovery in Observational Time Series](#)
- Selection of papers will be published in a special Springer LNCS issue (as in previous years)



Emilie Devijver

CNRS
France

Schedule of the day (1/2)

- 10:30h - 10h45: Workshop introduction by organizers
- 10h45 - 11h45: Time Series Analytics: Supervised Learning (chair: V. Lemaire)
 - Sepideh Koochfar and Laura Dietz. Adjustable Context-aware Transformer
 - Thach Le Nguyen and Georgiana Ifrim. Fast Time Series Classification with Random Symbolic Subsequences
 - Michael Franklin Mbouopda, Thomas Guyet, Nicolas Labroche and Abel Heuriot. Local vs global forecasting methods for groundwater level prediction
- 11h45 - 12h15 1st Poster session (Chair: T. Guyet) [5' presentation + 5' Q&A per poster]
 - Oshana Dissanayake, Sarah McPherson, Emer Kennedy, Katie Sugrue, Muireann Conneely, Laurence Shalloo, Pádraig Cunningham and Lucile Riaboff. Identification of the Best Accelerometer Features and Time-scale to Detect Disturbances in Calves
 - Nathan Morsa. EDGAR: Embedded Detection of Gunshots by AI in Real-time
 - Gautier Pialla, Maxime Devanne, Jonathan Weber, Lhassane Idoumghar and Germain Forestier. Data Augmentation for Deep Learning Time Series Classification
- 12h30 - 13h30: Invited talk by Dr Emilie Devijver: [Causal Discovery in Observational Time Series](#) (Chair: T. Guyet)
- Lunch break

Schedule of the day (2/2)

- **14h30 - 15:10h: 2nd Poster Session** (Chair: T. Ifrim) [5' presentation + 5' Q&A per poster]

- Chao Chen and Anuj Srivastava. ElasticRegNet: An Unsupervised Network for Joint Temporal Alignment
- Neha Pant, Durga Toshniwal and Bholu Ram Gurjar. Application of Attention Mechanism combined with Long Short-Term Memory for forecasting Dissolved Oxygen in Ganga River flowing through Uttar Pradesh, India
- Alejandro Pasos Ruiz and Anthony Bagnall. Dimension selection strategies for multivariate time series classification with HIVE-COTEv2.0
- Niccolò Zangrando, Piero Fraternali, Rocio Nahime Torres, Marco Petri, Nicolò Oreste Pinciroli Vago and Sergio Herrera. A framework supporting the life-cycle of time series anomaly detection applications

- **15:10h - 16h10: Time Series Analytics: Unsupervised Learning** (Chair: G. Ifrim)

- Arik Ermshaus, Patrick Schäfer and Ulf Leser. Window Size Selection In Unsupervised Time Series Analytics: A Review and Benchmark
- Ángel López-Oriona, Pablo Montero-Manso and José Vilar. Time series clustering based on prediction accuracy of global forecasting model
- Naji Najari, Samuel Berlemont, Gregoire Lefebvre, Stefan Duffner and Christophe Garcia. RESIST: Robust Transformer for Unsupervised Time Series Anomaly Detection

- **16h15 - 16h30: Workshop Closing.**

- **16h30 - ... Poster Discussion**

A few general things

- Oral presentations : 15' + 5' Q&A
- Spotlight posters : 5' + 5' Q&A
- For Zoom attendants, you can write questions on the chat or ask after the presentation (Zoom etiquette, please mute when not speaking)
- Schedule and papers are on the website:
<https://project.inria.fr/aaltd22/>
- We thank all authors, reviewers and attendees
- **Enjoy this new edition of AALTD!**