



IEEE Transactions on Artificial Intelligence

CALL FOR PAPERS

For Special Issue on
AutoML for Non-Stationary Data
(<http://tai.amlnsd.com>)



Description

Nowadays, data is commonly collected over time and susceptible to changes. A model trained under a false stationarity assumption is bound to become obsolete in time. It also happens to existing Automated Machine Learning (AutoML) systems. For more flexible and robust AutoML models over time, this special issue will integrate the growing international community of researchers working on AutoML and data stream learning, and have a fruitful collection of high-quality papers on the evolution and future development of AutoML.

Guest Editors (Alphabetic Order)

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Submission

Deadline: 2nd June, 2023.

Information for Authors (including paper template and submission site) at:

<https://cis.ieee.org/publications/ieee-transactions-on-artificial-intelligence/information-for-authors-tai>

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Topics of Interest (including but not limited to)

- (1) AutoML solutions for temporal data and data streams:
 - Change detection techniques
 - Adaptation strategies in AutoML pipelines
 - Online and incremental learning in AutoML
 - Meta learning and lifelong learning
 - Model evaluation methods
 - Dynamic hyperparameter optimization
 - Automated construction of configuration space.
- (2) Contemporary AutoML:
 - Hyperparameter and architecture optimization for non-stationary data
 - Multi-objective AutoML
 - AutoML fairness, interpretability and robustness
 - Transfer learning in AutoML
 - Human-in-the-Loop AutoML
 - Automated model exploration approaches
 - AutoML in distributed learning environments
 - Automated class imbalance learning
- (3) Applied and cross-disciplinary topics:
 - Spatial-temporal modeling for Geoinformatics
 - Sensory data analysis
 - Computer vision
 - Biometric identification and recognition
 - Automated software engineering systems
 - Healthcare
 - Development of opensource adaptive AutoML systems