

SPECIAL SECTION/ISSUE**Title*****Machine Learning and Inference in Advanced Applications*****Editors****Prof. Ansgar Steland**

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Statistical inference and machine learning are deeply linked together since the birth of the latter. However, the lectures provided at the session entitled *Machine Learning and Inference in Advanced Applications* of the Workshop on *Stochastic Models, Statistics and Applications, SMSA 24*, held in Delft, the Netherlands, in March 2024, confirmed that these links are very active research topics. Therefore, we plan to collect papers on these topics as a special section/issue of *AMCS*. This journal is particularly suited to present it, as it has a long tradition of publishing articles in both of these areas of research. We are convinced that both machine learning and statistical inference as well as their advanced applications can benefit from considering problems that arise at their intersection.

Scope

The scope covered by the call includes, but is not limited to, the following topics:

- consistency of classification rules, and deriving classifiers when only part of examples are labeled or deficient for other reasons
- learning and prediction problems where input data have a nonstandard form, for example, when they are structured time-series, e.g., sequences of neuron-like spikes, or when data are incomplete or have spatio-temporal structures
- change detection or dimensionality reduction tasks for such data as well as advanced applications.

Important datesSubmission deadline: **6 December 2024**Notification of acceptance: **1 April 2025**Possible publication: **mid-2025****Information for authors**

- The papers should meet high quality journal manuscript guidelines, in terms of research results, editorial quality, and language. Poorly written manuscripts will not be considered for review.
- The submission must be done online at www.amcs.uz.zgora.pl/?action=submission.
- **Important!** In your paper file, please put as the first keyword capitalized and asterisked ***ML+INFER***.
- The papers should be prepared with the journal LaTeX template, following strictly the guide for authors available at www.amcs.uz.zgora.pl/?action=guide.
- The submissions will undergo a review process, following the journal rules.
- The final decision will be made by the journal's Editor-in-Chief and Guest Editors.
- Please note that publication in *AMCS* is subject to page charges, invoiced upon paper acceptance. For details, please visit www.amcs.uz.zgora.pl/?action=guide.

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