

Machine Learning

~Special Issue Call for Papers~

Conformal Prediction

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Machine Learning invites papers for a special issue on **Conformal Prediction**.

SCOPE

Conformal prediction is a framework for complementing the predictions of machine learning algorithms with reliable measures of their accuracy. It has been used in combination with many popular techniques, including support vector machines and neural networks, and has been successfully applied to many challenging real world problems. The framework has been extended to additional problem settings, such as semi-supervised learning, anomaly detection, feature selection, and active learning. Recent developments in collecting large volumes of data have also required its adjustment to handle "big data".

This special issue follows the Sixth Symposium on Conformal and Probabilistic Prediction with Applications (COPA 2017) held in June 2017 at Karolinska Institute, Stockholm. However, authors are also invited to submit previously unpublished manuscripts and papers published in proceedings of other conferences, not only COPA 2017, provided the topic is relevant to conformal and probabilistic prediction.

Topics of interest include, but are not limited to:

- Theoretical analysis of conformal prediction, including performance guarantees
- Applications of conformal prediction in various fields, including bioinformatics, medicine, and information security
- Novel conformity measures
- Conformal anomaly detection
- Venn prediction and other methods of multiprobability prediction
- Conformal predictive distributions
- Probabilistic prediction
- On-line compression modelling

There will be usual restrictions for papers that, at the time of submission, have appeared in archived conference proceedings (such as COPA 2017 papers, published in the Proceedings of Machine Learning Research, volume 60). Such a paper will be considered for publication in this special issue provided the submission contains at least 30% of new material compared with the conference version of the paper. The authors of such submissions will be required to enclose a letter detailing the differences from the conference version.

IMPORTANT DATES:

- **Submission deadline: 1 February 2018**
- **1st Round of Review: 1 April 2018**
- **Revised submission due: 1 May 2018**
- **Final Notification: 1 June 2018**
- **Submission of Final Manuscripts: 1 July 2018**

PAPER SUBMISSION:

- Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals.
- All papers will be reviewed following standard reviewing procedures for the Journal.
- Papers must be prepared in accordance with the Journal guidelines: www.springer.com/10994
- Submit manuscripts to: <http://MACH.edmgr.com>

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Peter Flach, Editor-in-Chief

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