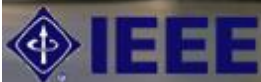




International Conference on Image Processing Theory,  
Tools & Applications



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### CALL FOR PAPERS: Special Session

## Data Processing and Machine Learning in Environmental Science

Rapid advances in Artificial Intelligence (AI), in particular Machine Learning, combined with Big Data, are opening new avenues for climate analysis and scenarios. The long-awaited promises of AI are now common in many disciplines. Applying AI methods, combined with physical knowledge, can improve climate analysis and provide better short-range day-to-day forecasting for hazardous weather and high impact events. With expanded storage capacity and new forms of Data Processing, Big Data and Machine Learning analytics are paving the way for more confident and reliable Climate Information for decision-making and impact research.

This special session aims at providing the most recent developments in the field of climate science and meteorology using Big Data, Machine and Deep Learning algorithms. The topics of this special session include (not limited to):

- Detection and tracking air pollutants using Image processing and Machine learning
- Machine learning for climate data analysis
- Machine learning for weather prediction
- Data Assimilation and Machine learning
- Machine learning algorithms in air quality modelling
- Machine learning approaches for pollutant sources identification
- Machine learning and remote sensing for applications in atmospheric science
- Environmental challenges in air pollution control using Machine learning
- Big Data application to wind engineering

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