



Anomaly and Novelty Detection and Explainability

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Message from the Guest Editor

Anomalies and novelties are very rare, and, in most cases, such observations are not available at training time. This means that machine learning methods based on traditional supervision are ruled out. The main problem in anomaly and novelty detection is to design artificial intelligence systems that are able to characterize the nature of anomalies and novelties, without seeing such observations at training time. An equally important problem is the design of artificial intelligence systems that are able to explain the decision-making process. Additional problems are related to (i) the difficulty of learning latent representations with deep neural models that disentangle normal and abnormal observations, (ii) the need to formulate new fundamental theories to clarify what anomalies can be detected, and (iii) the evaluation of proposed models in realistic scenarios. This Special Issue aims to gather articles addressing the problems enumerated above, as well as other problems related to anomaly and novelty detection.





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Message from the Editor-in-Chief

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