



Unsupervised Anomaly Detection

Guest Editor:

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Message from the Guest Editor

Anomaly detection (also known as outlier detection) is the task of finding instances in a dataset which deviate from the norm. Typically, anomaly detection is performed in an unsupervised setting, because no labeled training data are available. This causes many challenges in the research area, including a fair evaluation of algorithms, combining different algorithms (“outlier ensembles”) in a smart way or the interpretability of scores.

Potential topics of interest for this Special Issue include (but are not limited to) the following areas:

- New or improved unsupervised anomaly detection algorithms;
- Deep learning for anomaly detection;
- Interpretability of scores;
- Outlier ensembles;
- Unsupervised anomaly detection datasets for benchmarks and quality assessments;
- Applications of unsupervised anomaly detection, for example, surveillance, intrusion detection, fraud detection, medical applications or monitoring applications;
- Anomaly detection in time series/ images/ video and text data;
- Semi-supervised anomaly detection (also known as one-class classification).

