

Data Series Outlier Detection

Mots clés :

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Résumé du projet de recherche (Langue 1)

Data series outlier detection is a problem that finds applications in a wide range of domains, and especially where identifying abnormal situations is of critical importance. Previous work is based on the development of algorithms that can only detect specific types of patterns defined by domain experts (e.g., such as linear trends, high-frequency oscillations, abrupt changes, etc.), operate on individual points instead of sequences, may not always produce answers in real-time, or require human supervision. In this work, we propose to develop novel, general, unsupervised, real-time, sequence-based algorithms, in the case of very large, and continuously evolving (streaming) data series, that are able to detect outliers of arbitrary multiplicity.