Time-series data are sequences showing the value of a parameter over time. Important time series

include stock market prices, interest rates, sales of a product, scientific results, weather readings and medical records. A common query with time-series data is to find all time-series which are similar to given one in the sense of that their Euclidean distances are less that some prescribed threshold.

However, the two time-series should be found to be similar, irrelevant of where the step occurs.

To overcome this shortcoming is to use some important and intrinsic features of time-series.

The most commonly known features are the statistical features namely mean (μ), standard

deviation (σ), skewness (SKEW) and kurtosis (KURT). The other features are co-occurrence features

which consist of Energy, Entropy, and Correlation. The following data is the outcome of the above

features using some simulation method. This data set contains 3000 examples of control charts

synthetically generated by the process in Alcock and Manolopoulos [1].

Format

A matrix with 3000 rows (series) and 60 columns (timepoints)

Details

There are six different classes:

Normal (Rows 1-500)

Cyclic (Rows 501-1000)

Increasing trend (Rows 1001-1500)

Decreasing trend (Rows 1501-2000)

Upward shift (Rows 2001-2500)

Downward shift (Rows 2501-3000)

Reference

[1]. Alcock R.J. and Manolopoulos Y. Time-Series Similarity Queries Employing a Feature-Based Approach. 7th Hellenic Conference on Informatics. August 27-29. Ioannina, Greece 1999.

