

Equipment Sensor Signal Feature Extraction Through Time Series Clustering and Its Application in Defect Prediction

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Abstract

It is essential for the processes involved in the fabrication of semiconductors to have a rapid detection system for any signs that a fault may have occurred. When we applied a method called time-series clustering to the signal data of processing equipment, we were able to collect information on the presence of problems in the machine. We were able to forecast flaws with a greater degree of accuracy by employing the information as the feature values of a prediction model, as opposed to relying just on traditional feature values.

(Keywords:)

defect, prediction, feature extraction , k-shape , time-series data clustering , gap statistics , lnnnet

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