Abstract

Quality prediction model has been developed in various industries to realize the faultless manufacturing. However, most of quality prediction model is developed in single-stage manufacturing. Previous studies show that single-stage quality system cannot solve quality problem in multi-stage manufacturing effectively. This study is intended to propose combination of multiple PCA+ID3 algorithm to develop quality prediction model in MMS. This technique is applied to a semiconductor manufacturing dataset using the cascade prediction approach. The result shows that the combination of multiple PCA+ID3 is manage to produce the more accurate prediction model in term of classifying both positive and negative classes.

References

A Data Mining Approach for Developing Quality Prediction Model in Multi-Stage Manufacturing

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Index Terms

Computer Science   Artificial Intelligence

Keywords

Principal Component Analysis   ID3   Quality Prediction   Data Mining   Multi-stage Manufacturing