

■ 논문요약문4

논문제목	Product failure prediction with missing data
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개요	<p>In production data, missing values commonly appear for several reasons including changes in measurement and inspection items, sampling inspections, and unexpected process events. When applied to product failure prediction, the incompleteness of data should be properly addressed to avoid performance degradation in prediction models. Well-known approaches for missing data treatment, such as elimination and imputation, would not perform well under usual scenarios in production data, including high missing rate, systematic missing and class imbalance.</p>
연구결과	<p>To address these limitations, here We demonstrate the effectiveness of the proposed method through a case study using actual data-sets from a home appliance manufacturer.</p>
활용분야 및 기대효과	<p>we present a method for predictive modelling with missing data by considering the characteristics of production data. It builds multiple prediction models on different complete data subsets derived from the original data-set, each of which has different coverage of instances and input variables. These models are selectively used to make predictions for new instances with missing values.</p>