EWMA control chart by Dynamic Bayesian Network

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Abstract
This paper presents a modeling method of the EWMA control chart by a Dynamic Bayesian Network (DBN). The construction method of the network is proposed, and the algorithm for calculating the conditional probability table (CPT) is detailed. A simulation example illustrates the method and show the equivalence between these different tools.

Keywords: detection, dynamic Bayesian network, EWMA control chart.

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