ROBUST IDENTIFICATION ALGORITHM FOR THE ADDITIVE REGRESSION MODEL FOR FAULT DETECTION

Summary - this paper presents an algorithm for robust identification of dynamic systems for fault detection. To achieve robustness, the additive regression model with nonparametric estimation techniques was used to identify a model by prediction error methods and also to estimate an uncertainty associated with the model. The planned aim is the fault detection of the actuator in the evaporation station. The results of the modeling and the fault detection procedures have been presented. All research has been carried out based on the real process data recorded in the Lublin Sugar Factory S.A.