Optimization of Statistical Characteristics of a Machine Learning Model for Detection of Local Instabilities on a Track-Vehicle Scale Model

To train a bagged decision tree model with the “classification learner application” it is necessary to choose statistical features of the vertical acceleration signal.

The most useful features to train the model with high accuracy are found by using the “Diagnostic Feature Designer”. This app can rank a list of features according to the ANOVA score, which analyze the variance of the dataset.

The selection of the best ranked features of the vertical acceleration signal get from a Track-Vehicle Scale Model allow to create a model with high accuracy prediction to identify local instabilities in a Track-Vehicle Scale Model.

The aim of this research is to rank the most relevant statistical features of the training data (using the ANOVA score) in order to create a bagged decision tree model which can identify local instabilities on a Track-Vehicle Scale Model.

Bei Interesse wenden Sie sich bitte an:
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