System identification based on local linear model trees (LoLiMoT)

Nonlinear dynamic systems can be modeled by a set of multiple local linear models. These models can be identified from measured data. One algorithm that divides a complex model into the smaller linear models is the so called LoLiMoT algorithm [1]. In the present project, a C-implementation of the algorithm should be developed. Furthermore, an extension of the algorithm to handle system dead times should be developed and implemented as well. The C-implementation of the algorithm should be tested

- in Matlab
- in Simulink

possible application: identification of a complex heating, ventilating and air conditioning system


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