

A View on Filtering of Continuous Data Signals

Ivan Nagy; Miroslav Kárný

Abstract: A spline approximation of continuous signals and its extension to the piecewise polynomial functions has been derived. Bayesian identification is used for determining the parameters of the approximation. The conditions on the smoothness of the approximation are introduced in the form of prior information about the parameters through so called fictitious data. The approximation can be used e. g. for spline modelling, filtering of data signals and it enables differentiation of filtered signals.

Keywords:

AMS Subject Classification: