Polynomial Smoothing of Time Series with Additive Step Discontinuities

Web: http://eeweb.poly.edu/iselesni/patv

This MATLAB software package implements the algorithms described in the paper:

'Polynomial Smoothing of Time Series with Additive Step Discontinuities'
I. W. Selesnick, S. Arnold, and V. R. Dantham
Polytechnic Institute of New York University
IEEE Transactions on Signal Processing
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• Main functions

  patv   Polynomial approx. and TV filtering (PATV)
  patv_Lp PATV using Lp norm (Enhanced PATV)
  cpatv   Constrained form of PATV (C-PATV)

  lopatv Local PATV (LoPATV)
  lopatv_Lp   LoPATV using Lp norm (Enhanced LoPATV)

• Examples

  Example 1   PATV, C-PATV, and enhanced PATV
  Example 2   LoPATV and enhanced LoPATV
  Example 3   Filtering of WGM sensor using LoPATV and enhanced LoPATV

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