

PROJECT / SparseModeling and Estimation of Motion Fields

SPARSIS

Main Objective:

In this project we will explore the use of sparse techniques to improve the estimation of multiple motion fields as well as spacevarying switching matrix (stochastic matrix) that describes the switching process associated to the movement of each target. As scientific outcomes of the project, we expect to obtain reliable estimates for the model parameters (many hundreds), to remove the over smoothed character of the field estimates. We also expect to speed up the estimation procedure bringing it closer to real time applications and extend these techniques to multicamera settings. We also expect to develop an adaptive algorithm for the online estimation of multiple motion fields able to update in a recursive way the number of fields and the field estimates whenever new information arrives.

Reference: PTDC/EEI-PRO/ 0426/2014, Funding: FCT, Start Date: 01-07-2016

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