

Matlab Package “TEPLS” for “Tensor Envelope Partial Least Squares Regression”

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1 Introduction

“TEPLS” is a collection of MATLAB functions for fitting the tensor partial least squares regression model described in the following paper.

- Zhang, X. and Li, L. (2016+), “Tensor Envelope Partial Least Squares Regression”.

2 Prerequisites and dependence

- tensorreg toolbox (<http://hua-zhou.github.io/software/tensorreg/>)
- tensor toolbox (<http://www.sandia.gov/~tgkolda/TensorToolbox/index-2.5.html>)

3 Examples

- “2D_example.m” contains simulation example of fitting a univariate response on a matrix (2-way tensor) predictor
- “3D_example.m” contains simulation example of fitting a multivariate response on a 3-way tensor predictor