Transient Artifact Reduction Algorithm (TARA) based on Sparse Optimization

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

Software version: 1

This software accompanies the above paper which addresses the suppression of transient artifacts in signals, e.g., biomedical time series.

Matlab implementation of transient artifact reduction algorithm (TARA)

- lpfcsd.m: low-pass filtering / compound sparse denoising
- lpfcsd2.m: LPFCSD taking input parameters: theta, sigma
- tara_L1.m: TARA using the L1 norm penalty
- tara2_L1.m: TARA using the L1 norm penalty, taking input parameters: theta, beta, sigma
- tara.m: TARA with non-convex penalties.
- tara2.m: TARA with non-convex penalties, taking input parameters: theta, beta, sigma

Examples in Matlab

- LPFCSD_Example Low-pass filtering and compound sparse denoising
- TARA_Example_1 TARA applied to NIRS data
- TARA_Example_2 TARA applied to NIRS data

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