

Matlab program for the denoising and detection of eye movement data

demo_detect_saccades.m (main demo program)
cgtv.m (main program for noise reduction)
eyetracking_denoising.m
detect_saccades.m

For a video demonstration of the interactive software, see:

<http://eeweb.poly.edu/iselesni/eye-movement/>

This software accompanies the paper:

Detection of normal and slow saccades using implicit piecewise polynomial approximation
Journal of Vision, vol. 21, no. 6, Jun. 2021.
doi: 10.1167/jov.21.6.8.

<https://jov.arvojournals.org/article.aspx?articleid=2772700>

Authors: Weiwei Dai (1), Ivan Selesnick (1), John-Ross Rizzo (2), Janet Rucker (2), Todd Hudson (2)

(1) Department of Electrical and Computer Engineering
Tandon School of Engineering
New York University
Brooklyn, New York, USA

(2) Department of Neurology
School of Medicine
New York University
New York, NY, USA

Ivan Selesnick <selesi@nyu.edu>
Weiwei Dai <wd471@nyu.edu>
John-Ross Rizzo <JohnRoss.Rizzo@nyulangone.org>
Janet Rucker <Janet.Rucker@nyulangone.org>
Todd Hudson <Todd.Hudson@nyulangone.org>