**GetContours** is a Matlab-based platform that provides straightforward click-and-drag positioning of reference points controlling a cubic spline fit to a displayed ultrasound image of the tongue surface.

- supports image filtering, averaging, and contrast enhancement
- <u>Praat</u> TextGrids labeled on associated audio can be imported to identify and annotate articulatory events of interest, allowing rapid selection of key frames within image sequences
- optional 'plug-in' procedures can be used for image pre-processing (e.g. resizing or enhancement) and automated tracking (e.g. 'snake' deformable active contour models)
- use separate DotsPlace, DotsTrack procedures to track image features to generate e.g. head-centric correction signals of extracted contours

See 'help GetContours' within Matlab for usage and examples.

See UltraFest2015.pdf (a poster presented at the <u>Hong Kong Ultrafest VII</u>) for an overview of GetContours.

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## Release Notes:

v0.8 09DEC15 (UltraFest HK version)

v0.9 25AUG16 bug fixes, Snake implementation, Dot tracking

v1.0 22OCT16 inherit anchors into previously visited empty frame

v1.1 11NOV16 fix explicit keyframes issue

v1.2 02FEB17 fix point addition order, DotsTrack update

v1.3 14JUN17 support skipping bad regions in DotsTrack

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