Iterative multi-path tracking for video and volume segmentation with sparse point supervision

Laurent Lejeune, Jan Grossrieder, Raphael Sznitman

PII: S1361-8415(18)30663-7
DOI: https://doi.org/10.1016/j.media.2018.08.007
Reference: MEDIMA 1404

To appear in: *Medical Image Analysis*

Received date: 21 February 2018
Revised date: 21 August 2018
Accepted date: 27 August 2018

Please cite this article as: Laurent Lejeune, Jan Grossrieder, Raphael Sznitman, Iterative multi-path tracking for video and volume segmentation with sparse point supervision, *Medical Image Analysis* (2018), doi: https://doi.org/10.1016/j.media.2018.08.007

Highlights

- Ground-truth annotation are necessary to train machine learning models.
- We annotate video and volumetric sequences using a single 2D point per frame.
- No constraints on appearance, shape, and motion/displacement of object of interest.
- Promising results on surgical tool and slitlamp videos, brain MRI, CT scans of inner ear.