

Detailing changes on

PhD Thesis

“Medical Image Segmentation Combining Level Set Method and Deep Belief Networks”

by

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1. Changes as required by the first reviewer

- Added one more sentence about deformable model in the abstract: “Also, this kind of active contour methods, may stuck in image data do not belong to the object of interest.”
- Changed the name of the section “2.3.1 Discriminative Classifiers” to “2.3.1 Boosting Methods”
- Defined precisely terms I_p and I_q in equation (2.45)
- The algorithm of combining level set and DBN is added in chapter 3

2. Changes as required by the second reviewer

- The taxonomy of the image segmentation methods in the abstract is changed consistently with chapter 2.
- Changed “that it can easily integrate” to “that they can easily integrate” in page 2
- Changed “The motivation for using these datasets are based” to “The motivation for using these datasets is based” in page 4
- Changed “a posteriori (MAP)” to “a priori (MAP)” in page 11
- Revised sentence “In particular, the prior models assumed in both energy terms in (2.12) are unlikely to capture the variations present in most segmentation problems present in medical image analysis because of the usual large variability found in the foreground objects in terms of appearance and shape.” to “In particular, the prior models assumed in both energy terms in (2.12) are unlikely to capture the variations presented in most medical image segmentation problems because of the usual large variability found in the foreground objects in terms of appearance and shape.” in page 12
- Changed “In summary, the fist two” to “In summary, the first two” in page 13
- Mentioned the paper “Active Arcs and Contours” by Hayden Schaeffer in page 14
- Revised sentence “...to estimate the parameters of shape and appearance high capacity models.” to “...to estimate the parameters of high capacity models about shape and appearance information.” In page 14
- Changed “ASM uses statistical shape information...” to “AAM uses statistical shape information.” in page 24
- Cited the paper “Deep Learning Shape Priors for Object Segmentation”, by Fei Chen et al. (CVPR 2013) in chapter 2.