

CS 778 Project Proposal

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Subject : Active Contours without Edges

Experimentation

In this project I will try to reproduce the paper of Chan and Vese with different images, i.e. with medical images. In their paper, Chan and Vese experiment with different types of images:

- Images with contours with a gradient
- Images with contours without a gradient, i.e. with cognitive contours

It is possible to find such images in the field of medical image analysis. I am willing to apply active contours to images both with and without a gradient.

As I apply active contours to these images, I will also introduce noise and see the effect of increasing noise on the algorithm as well as on the images with and without edges. So the report will include a validation of the active contours method on medical image data and an assessment of it with respect to noise.