

V. Conclusion

In this paper, we have described the fundamental formulation of image segmentation based on level set method. Level set image segmentation method based on gradient applies to the image with great gradient diversity, while method based on Mumford-Shah functional applies to the image with noise. In future work, further improvements in deformable models will be made in model representation, model training and learning, and model performance validation. The main goal of this paper is to help researcher to understand the level set based segmentation method. This paper will be helpful to those who want to apply level set method into their research.

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