

Abstract

Medical image segmentation is a difficult task, essentially due to the inherent complexity of human body structures and the acquisition methods of this kind of images. Manual segmentation of medical images requires advance radiological expertize and is also very time-consuming. Several methods have been developed to automatize medical image segmentation, including multi-agent approaches. In this paper, we propose a new multi-agent approach based on a set of autonomous and interactive agents that integrates an enhanced region growing algorithm. It does not require any prior knowledge. This approach was implemented and experiments were performed on brain MRI simulated images and the obtained results are promising.