PROFILING THE FEATURES OF PRE-SEGMENTED HEALTHY LIVER CT SCANS: TOWARDS FAST DETECTION OF LIVER LESIONS IN EMERGENCY SCENARIO

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Abstract

Automating the detection of lesions in liver CT scans requires a high performance and robust solution. With CT-scan start to become the norm in emergency department, the need for a fast and efficient liver lesions detection method is arising. In this paper, we propose a fast and evolvable method to profile the features of pre-segmented healthy liver and use it to detect the presence of liver lesions in emergency scenario. Our preliminary experiment with the MICCAI 2007 grand challenge datasets shows promising results of a fast training time, ability to evolve the produced healthy liver profiles, and accurate detection of the liver lesions. Lastly, the future work directions are also presented.