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Improving Segmentation of Liver Tumors Using Deep Learning

Authors [Authors and affiliations](#)

José Mejía, Alberto Ochoa , Boris Mederos

Chapter

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Abstract

Liver tumor segmentation from computed tomography images is an essential task for the automated diagnosis and treatment of liver cancer. However, such task is difficult due to the variability of morphologies, diffuse boundaries, heterogeneous densities, and sizes of the lesions. In this work we develop a new system designed for the segmentation of tumors from images acquired by computed tomography, the proposed system uses a network based on convolutional neural networks (CNN). The results are compared with a segmentation carried out by medical experts.