

# 3D Cascade convolutional architecture for Segmentation of Structural Brain MRI

A paper describing the method is currently in preparation and will be made public as soon as a decision has been reached.

We design a cascade architecture for brain tissue segmentation based on 3D convolutional neural network (CNNs). The cascade architecture achieve segmentation in coarse-to-fine procedure. Considering the nature of deep learning, we don't adopt any preprocessing operators (including skull-stripping). Consequently, the proposed method is robustness.

We want to test the proposed 3D cascade architecture on sets of multimodal MRI scans: T1, T1-IR, and T2-FLAIR.