

# MMAN: Multi-modality aggregation network for brain segmentation from MR images

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## Abstract

A multi-modality aggregation network (MMAN) was applied for brain segmentation from MR images. A short description of the method is given in the following. The proposed algorithm is automatic, costing about 13sec per subject on Nvidia Titan X GPU machine. In the network, the multi-modality images including the T1, T1-IR and T2-FLAIR are used in MMAN. The multi-scale features of the multi-modality images are extracted and aggregated with the application of dilated convolution and Inception structure in MMAN. The training process is based on the provided train images with classical data augmentation strategies. In the cross-validation procedure, the proposed MMAN had a good segmentation performance. The paper of this network is currently in preparation and will be made public as soon as possible.

## Index Terms

brain segmentation, multi-scale feature, multi-modality, segmentation network.