A Nested Encoder-Decoder Network with Multi-Attention for Brain Segmentation

In this network, multi-modality images including T1, IR and FLAIR are used for segmentation. A classic encoder and decoder network is to extract the multi-scale features of multi-modality brain image. The network uses GDPConv and attention module to better capture spatial feature. The network is 2.5D and no other training data is added to help with the training. The proposed algorithm is automatic and takes about 30 seconds to process each sample on a NVIDIA GTX 1060 GPU.