

Brain Tumor Segementation

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A typical segmentation example with true and predicted labels overlaid over T1c MRI axial, sagittal and coronal slices. Different colors label different tumor sub-regions.



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U-net architecture (example for 32x32 pixels in the lowest resolution). Each blue box corresponds to a multi-channel feature map. The number of

channels is denoted on top of the box. The x-y-size is provided at the lower left edge of the box. White boxes represent copied feature maps. The arrows denote the different operations.



networks proposed to hierarchically segment whole tumor (WNet), tumor core (TNet) and enhancing tumor core (ENet) sequentially.

References:

^[1] Myronenko, A. 3D MRI brain tumor segmentation using autoencoder regularization

^[2] Olaf Ronneberger, Philipp Fischer, and Thomas Brox. U-Net: Convolutional Networks for Biomedical Image Segmentation

^[3] Guotai Wang, Wenqi Li, S'ebastien Ourselin, and Tom Vercauteren. Automatic Brain Tumor Segmentation using Cascaded Anisotropic Convolutional Neural Networks

^[4] Dmitry Lachinov, Evgeny Vasiliev and Vadim Turlapov. Glioma Segmentation with Cascaded Unet