Med-DANet V2: A Flexible Dynamic Architecture for Efficient Medical Volumetric Segmentation (*Supplementary Material*)

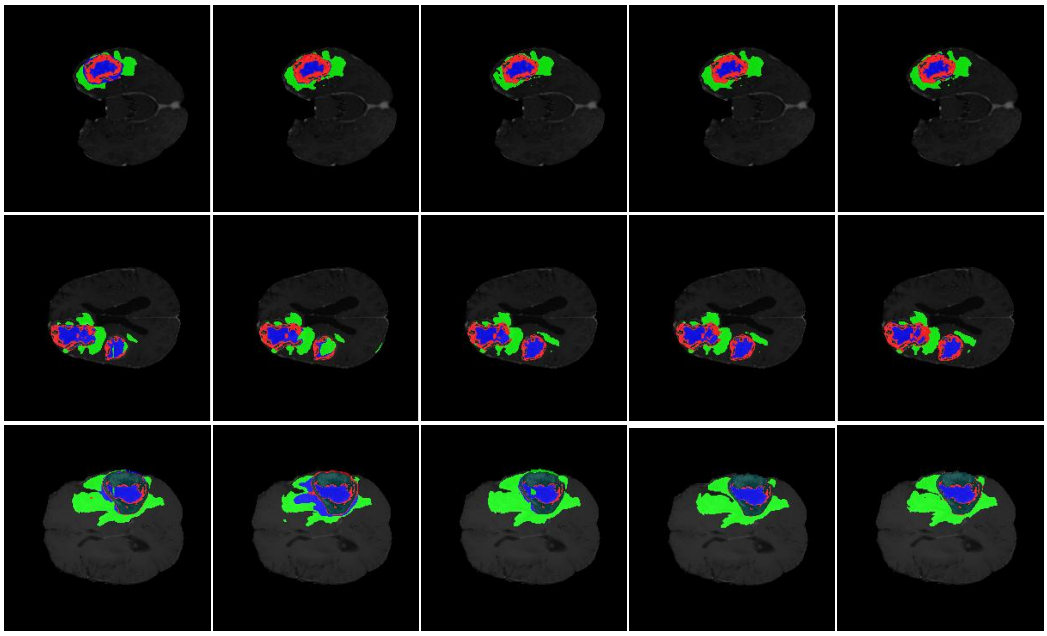
1. More Visualization

1.1. Visual Comparison on BraTS 2019 Dataset

The **qualitative analysis** on the segmentation performance of various methods are shown in Fig. 1, including 3D U-Net, V-Net, Attention U-Net and the proposed Med-DANet V2. Due to the labels of the validation set are not available, we perform the five-fold cross-validation evaluation on the training set for a fair comparison. The visual results clearly demonstrate that our framework significantly enhances the delineation of brain tumors, yielding improved segmentation masks by focusing on the tumor regions that are more worth segmenting with the obtained optimal decision in terms of input resolution and quantization.

1.2. Visualization of the Cropped Region

The visualization of the cropped region on BraTS 2019 dataset is also shown in Fig. 2, where the cyan boxes indicate the cropped input determined by the Policy Network and Crop Position Network. It can be clearly observed that our framework can adaptively select the specific cropping target among different slices based on the segmentation difficulty and more concentrate on the tumor-relevant regions for the cropped slices.



3D U-Net VNet Att. U-Net **Ours** Ground Truth

Figure 1. The Visual Comparison on BraTS 2019 dataset.

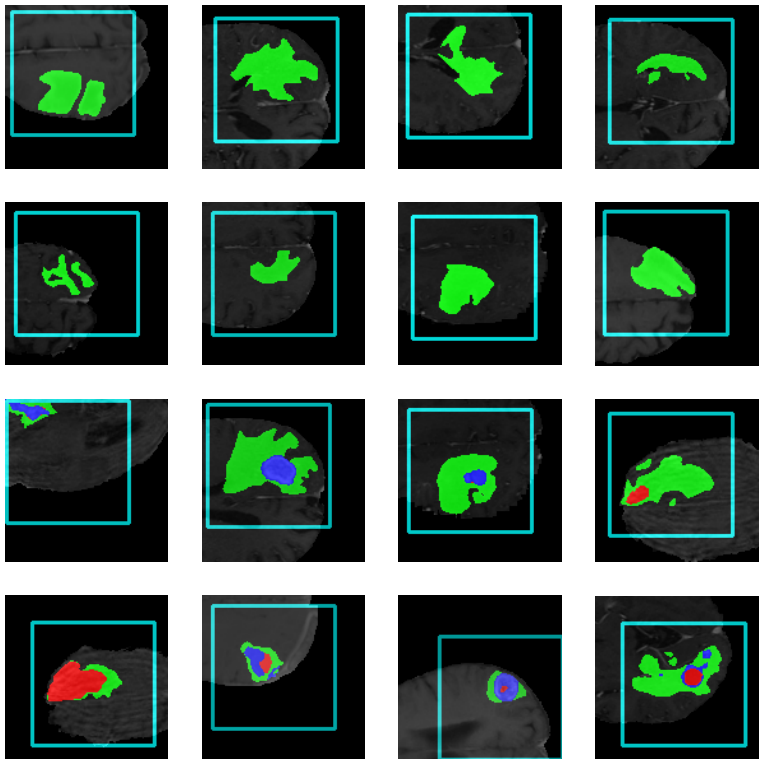


Figure 2. The Visualization of the Cropped Region.