Summery of work classic segmentation project:

* Train GMM over different MRI modalities, different GMM model for every modality with specified parameters. Eventually the most efficient was an AND mask of T2 and FLAIR.
* Train GMM of multi-modal MRI image, tried many parameters and differen modalities. The most efficient one was 2D modal using 3 classes, the data was T2 and FLAIR for the whole tumor segmentation.
* - Train SVM over one example (~20000 data multimodal data points). Got an average DICE ~0.7. trained on HG0001 and tested on another HG sample. Tried to train over train data with many samples – not so successful due to computation limitation.
* Otsu’s method for thresholding into 3 classes, then quantization of the image into 3 classes. Robust and quick computation method.
  + Divided into 3 classes (2 thresholds) was fount the most efficient one.
  + Try to add some improvements:
    - Bias field correction
    - Smoothing the image using mean/Gaussian filter
    - Remove small noise
    - Fill holes
  + Average DICE over 2o HG samples -
  + Added fill holes – average DICE of 0.572.
  + Added remove of 20px and fill holes – average DICE of 0.57