

## COE 494: Introduction to Biomedical Imaging

### Assignment 3

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Using the brain MRI datasets provided, use image segmentation to segment the tumor from the normal brain tissues.

The methods you should use for segmentation are:

- 1- Pixel-based
- 2- Edge-based
- 3- Region-based

For each of the methods above:

- Show the original images and the resulting images with the segmented tumor.
- State which segmentation method was the best based on the quality of the segmentation provided, over/under segmentation, noise.

You should apply your method on at least one patient- single patient ID (PID).

**Submission instructions:** Submit the Matlab code (.m) file to iLearn by the deadline. Late submissions will be penalized according to the syllabus late policy. No submissions will be accepted after 4 days of the deadline.