Math 320 – Computer Methods in the Mathematical Sciences I.

Project Title: Extraction of Brain Tumors from MRI Scans

Authors: Varun S. Rajagopal

1   Presentation

Comments:

- Very good justification of your work, and why you're doing it.
- Very nice demonstration of convolution filter.
- Great job incorporating code into the talk.
- Great examples for all your filters.
- Beautiful images throughout.
- Nice idea to implement it on a random Google search photo!

Grade: 10/10
Terrific presentation of a sophisticated and well-motivated topic.

2   Paper

Comments:

- It would be interesting to hear details about how you modified the method from Patil-Balchandra.
- Nice job citing throughout.
- Good example convolution.
- Nice explanation of effects of high-pass and median filtering.
- Explanation of watershed transform is a bit unclear.
- Your paper does an excellent job of citing relevant bits of code in the text of the paper, then reporting the full (well-commented) code at the end.

Grade: 10/10
A computationally and mathematically sophisticated account of image processing with a great application. Excellent job!