

Assignment 2

January 15, 2019

1 Given the RGBI layers of an image classify each pixel to river or non_river class using Bayes Decision Classifier

Consider the following instructions

1. Use the pixel at coordinates given in text files river.txt and nonriver.txt as training data.(MATLAB users add 1 to the values loaded to get correct the offset)
2. Label river pixels as class 1 and others as class 0
3. Use the pixel values of 4 layers as 4-Dimensional feature vectors.
4. Calculate accuracy using the ground_truth.mat
5. Avoid using for loops and if else clauses and use of advanced in-built functions
6. Print the time taken by the code to execute
7. Run the code for different values of prior probabilities and analyze their effect on accuracy.