Good luck!

The Assignment, Part 2: Coding

The Assignment, Part 1: Inspiration and Background

Goals and Overview

Getting the Given Code

Implementation Constraints and Advice

Entropy

CPSC 221

All other files will not be used for grading.
The following files are used to grade PA3:

- toqutree.h
- toqutree.cpp
- partners.txt

The implementation of all of your functions. You should add additional tests yourself!

Download the source files from...

squares in our recursively defined tree!

The HSLAPixel dist function.

corner (0,0), and lower right corner (i,j).

First in a column-wise navigation of the feasible region of splits.

Finally, the squares you reconstruct out of a partition of the current square are (recursively) the basis for the child nodes.

Note that in the general case, one of the 4 squares will be a whole square subset of the current image, one will be a horizontal shift and to the right of the optimal splitting point.

QuadTrees on a Torus

In specifying the algorithm we make several conventional assumptions, illustrated below:

The two images below illustrate the result of this assignment. Note that the image on the right sacrifices color detail in rectangles that do not contain much color variability in the original image, but maintains detail by using smaller rectangles in areas of the image. The inspiration for this assignment came from an article...

The exact algorithm he used is not given in the article, but we will create similar images using a strategy for image representation that do not contain much color variability in the original image, but maintains detail by using smaller rectangles in areas of the image.

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