Subject: Very complicated visualization problem
Posted by khaldanr on Sat, 26 Apr 2008 01:31:24 GMT
View Forum Message <> Reply to Message

Dear members,

I have a complicated visualization problem I am trying to solve almost one week!!!. Let me please explain it analytically.

1- I have a three-channel image img = [500, 500, 3].
2- I compared the values of each element in each channel and wrote the max one in a new three-channel array imgmx = [500, 500, 3]. So, the first channel imgmx[500, 500, 0] contains all the elements of the image where img[i, j, 0] ge img[i, j, 1] and img[i, j, 0] ge img[i, j, 2] and 0B for the rest of the elements of the first channel. The second channel imgmx[500, 500, 1] contains all the elements of the image where img[i, j, 1] ge img[i, j, 0] and img[i, j, 1] ge img[i, j, 2] and 0B for the rest of the elements of the second channel. And the same thing for the third channel imgmx[500, 500, 2].
3- I calculated the histogram of each channel of the array imgmax =[500, 500, 3] separately. So, I have hist1 for the first channel imgmx[500, 500, 0], hist2 for the second channel imgmx[500, 500, 1] and hist3 for the third channel imgmx[500, 500, 2].
4- I segmented each histogram in some of its local minima. For example, hist1 is segmented in the local minima s1 = [s3, s7] (three segments in the first channel), the hist2 in the local minima s2 = [s1, s4, s5] (four segments in the second channel), and the hist3 in the local minima s3 = [s2, s3, s5, s9] (five segments in the third channel.

Now the BIG question is how to visualize the segments of the three histogram all together. So, I want to tv the array imgmx = [500, 500, 3] and instead of showing the value of the elements, I want to see the segments all together. It is important to mention that the segments are NOT overlapped. For example, I want all the elements of the first channel of imgmx wish lays between s0 and s3 to have their won color, the elements which lays between s3 and s7 to have their won color and the elements which lays between s7 and the end of the histogram to have their won color, and so on for the second and the third channels. AGAIN I want to visualize all the segments of the three channels together, with each segment to have its won color!!!.

Please any help in this complicated problem.

Khaldan