

FALL SEMESTER 2021-2022

CSE3018 CONTENT BASED IMAGE AND VIDEO RETRIEVAL LAB

Slot: L45,L46 Date: 18.08.2021

Ex.3 Implementation of a CBIR using Color Statistical Features

A. Implement a CBIR system that uses features derived from Color Descriptors.

Database – Minimum 2 categories and 10 images in each category

Note:

- 1. Read an image in RGB Color Space
- 2. Transform this image into other color spaces like CMY, HSV and Grayscale. Show all of them in a 2X2 subplot.
- 3. Execute color plane slicing in RGB color space.
- 4. In each of the plane of R, G, B, extract statistical features like mean, standard deviation, variance, skewness, kurtosis. A single image will have 5 features in each color plane. So totally 15 color based features for every image; Also extract no. of rows, no. of columns and no. of color channels in an images. So 3 features. Altogether, every image will contain 18 features.
- 5. Write in an Excel File, in a format like the one given below:

Image	Red –	Red –	•••	Green –	Green -	Blue –	Blue -	No. of	No. of	No. of
Name	Mean	Variance		Mean	Variance	Mean	Variance	Rows	Cols	Color
										channels