Electrical and Computer Engineering, Texas Tech University

ECE 5332-011: Deep Learning for Medical Signal/Image data

Alexandre Soares da Silva, R11485685

Rishi

Jud

Changing the radius of the high/low pass filters increases or decreases their modifying power in the images. Form smaller radius sizes,

COMMENT ABOUT CONVOLUTION AND SPACIAL FILTERING

COMMENT ABOUT CLUSTERING

**3. Simple Image classification problem**

The proposed problem statement required the use of the SURF (Speeded-up Robust Features) algorithm to match and classify 10 3D-rendered objects from 24 different perspectives. The assignment’s goal was evaluate the accuracy of such classification engine with the use of different numbers of features and varying dataset sizes for training and testing. The dataset used was the Columbia University Image Library (COIL-20) dataset, with selection of 10 objects in 24 different perspectives.

SURF, as SIFT (Scale-invariant feature transform), approximates Laplacians of Gaussians