TPA 15: Multi-band Texture Segmentation

January 29, 2015

Problem Statement: Given a multi-band textured image, segment out the different bands of textures.

Input: Input to the system are the following

- Multi-band textured image.

Expected Output: Segmented output corresponding to the input image.

Datasets:

- Vistex
- Outex
- Brodatz

Tasks

- *Unsupervised*
- *Supervised (Training Samples will be given).*

Reference

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- Scharfenberger, Christian, Alexander Wong, and David A. Clausi. "Structure-guided Statistical Textural Distinctiveness for Salient Region Detection in Natural Images." TIP(2015).

- Cote, Melissa, and Alexandra Branzan Albu. "Sparseness-Based Descriptors for Texture Segmentation." Pattern Recognition (ICPR), 2014 22nd International Conference on. IEEE, 2014.

- "Indoor Vs. Outdoor Scene Classification using Probabilistic Neural Network"; Lalit Gupta, Vinod Pathangay, Arpita Patra, A. Dyana and Sukhendu Das; EURASIP Journal on Advances in Signal Processing, Special issue on Image Perception, Volume 2007 (2007), pp. 1-10.