Abstract

Texture Classification plays a vital role in medical image, remote sensing image, pattern analysis for the past three decades. Eventhough it is three decades problem, still having a lot of scope in pattern analysis. Textural features corresponding to visual properties of texture are highly desirable for two reasons; they will be optimum in terms of feature selection and will be applicable to all kinds of textures. Some of the perceptual features are coarseness, contrast,
Multiple Representation of Perceptual Features for Texture Classification

direction and busyness. The aim of this paper is to present a new method to estimate these perceptual features. The proposal based on two representations: Original Image Representation and Autocorrelation Function Representation. These estimated perceptual features measures are applied to classification on large image data set, the well-known Brodatz database using k-nearest neighborhood classifier.

References


- B. Julesz, "Visual pattern discrimination", IRE Trans., Info. Theory, vol. IT-8,
Multiple Representation of Perceptual Features for Texture Classification


Index Terms

Computer Science
Emerging Trends in Technology
Keywords
Texture Classification Plays A Vital Role In Medical Image Remote Sensing Image Pattern Analysis For The Past Three Decades. Eventhough It Is Three Decades Problem Still Having A Lot Of Scope In Pattern Analysis. Textural Features Corresponding To Visual Properties Of Texture Are Highly Desirable For Two Reasons; They Will Be Optimum In Terms Of Feature Selection And Will Be Applicable To All Kinds Of Textures. Some Of The Perceptual Features Are Coarseness Contrast Direction And Busyness. The Aim Of This Paper Is To Present A New Method To Estimate These Perceptual Features. The Proposal Based On Two Representations: Original Image Representation And Autocorrelation Function Representation. These Estimated Perceptual Features Measures Are Applied To Classification On Large Image Data Set The Well-known Brodatz Database Using K-nearest Neighborhood Classifier.