Abstract

Analysis of skin texture is very useful for creation and development of cosmetic products, skin texture modeling, and face recognition in security applications and also computer-assisted diagnosis in dermatology. Several types of skin diseases are increasing human begins daily life; to deal with an effective and also very important manner the disease must be diagnosed properly. Skin texture analysis is one of the major problems in the field of medical diagnosis for finding skin diseases. Hence, the texture of skin is analyzed based on various features and characteristics so that the inconsistencies can be avoided during the treatment. The main goal of this study was to examine the texture of the human skin by image processing method. The skin properties like skin oiliness, dryness, pigmentation, fungus, infection, allergic symptoms and itching kind of problems association with skin texture profile is debated in the proposed work. Skin images are pre-processed using various pre-processing techniques and the Texture Filtering method is used for segment the skin textures so it can easy to identifying the skin properties accurately. Finally machine learning techniques are used to analyze and categorize the skin textures based on the texture and shape features. The experimental result shows that
Decision Tree algorithm outperforms well in categorizing skin textures.

References


Index Terms

Computer Science

Pattern Recognition

Keywords
Machine learning, Skin Texture Analysis, Matlab 2012 Software.