Abstract

Without formulating physical contact with the object, Remote sensing is the achievement of information about an object or phenomenon. The contact of remote sensing (RS) images will turn into more complicated due to the vast data quantity, to defeat this challenges the users can admittance remote sensing images based on semantics. In the existing method, the Quin-tree is used for the decomposition of Content Based Image Retrieval in Remote Sensing, but it has poor retrieval accuracy. So the intelligent decomposition phase is used in our proposed method, which decomposes the image based on the spatial-spectral heterogeneity. The proposed method will perform visual feature, object semantic, spatial relationship semantic, scene semantic based retrievals to ensure fine retrieval schema, which will obtained by applying mapping and the SS modelling in the decomposed remote sensing image. The human intervention will be introduced in the system to ensure the high retrieval accuracy. The implementation result shows the effectiveness of proposed technique, in segmenting the text lines from the input document. The performance of the proposed method is evaluated by comparing the result of proposed method with the conventional SBRSIR technique. The comparison result shows that our proposed method more accurately retrieves the images based on the VF, OS and SS than the conventional SBRSIR technique.
Semantic Indexing based Remote Sensing Image Retrieval: An Intelligent Decomposition Approach

References


Index Terms

Computer Science

Algorithms

Keywords

CBIR  Remote sensing (RS) images  Visual Features (VF)  Object Semantics
Watershed Segmentation

SVM

Attribute Relational Graph (ARG)

Spatial-spectral Heterogeneity

Scene Matching model