Abstract

The key problem in achieving efficient and user friendly Content Based Image Retrieval (CBIR), in domain of images is the development of a search mechanism to guarantee delivery of minimal irrelevant information (high precision) while insuring that relevant information is not overlooked (high recall). The current CBIR results need to be improved by indexing images according to semantics rather than objects that appear in the images. This problem of creating a meaning based index structure is solved using a concept based model with domain dependent ontology. The research analysis shows that, CBIR with ontology is still in primitive stage with very few topological relations exploited in the research, and the results still not satisfactory. Thus we propose a system for image retrieval which will use spatial information to build many of the topological relations like connectivity, adjacency, membership and orientation using ontology along with low level color and texture features for CBIR recognition.

References

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Index Terms

Computer Science

Information Sciences

Keywords

Image Retrieval
Content Based Image Retrieval (CBIR) System
Ontology
Spatial Information
Topological Relationship