A Project Report on

"Feature Extraction Based Learning Image Search Engine (FELIS)"

Submitted in partial fulfillment of the requirement for
Degree in Bachelor of Computer Engineering

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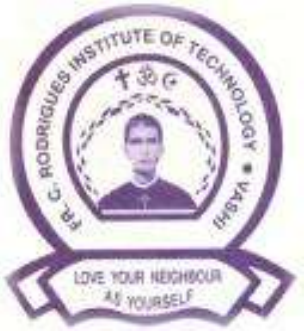

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ABSTRACT

Search Engines are applications used to find information from given large amount of data collection. Generally, search engines as a desktop application are used to find information from local computer and as a web application to find information from World Wide Web.

The basic disadvantage/limitation of existing image search engines is that their result depends on metadata of the image and hence produces lots of undesirable results. For efficient processing, this metadata must be produced manually and must be contain a complete description of the image. For large database this requires lots of human effort. Also writing a general description of an image is very difficult. Hence creating an efficient search engine is very difficult task.

To avoid this, we present an idea of implementing a feature extraction based search engine; which will use 'content/feature of image' as a relevance factor rather than its metadata. Hence better results can be obtained. Existing algorithms of image processing can be applied to an image and by using the knowledge base; such a search engine can be implemented. The major advantage of this search engine would be that it while it will be efficient it won't require much of human efforts.

We took color, texture and shape of an object as the features of the image for implementation purpose. During implementation of the projects, we will be considering following four major issues.

1. Feature Extraction From Image,

2. Feature Representation and storage in database,

3. Searching an Image with a specific color histogram,

4. Searching an Image containing an specific object.

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