

## **Abstract**

*Abstract*—This final task proposes an approach using genetic algorithm for computing the region based image similarity. The image is denoted using a set of segmented regions reflecting color and texture properties of an image. An image is associated with a family of image features corresponding to the regions. The resemblance of two images is then defined as the overall similarity between two families of image features, and quantified by a similarity measure, which integrates properties of all the regions in the images. A genetic algorithm is applied to decide the most plausible matching. The performance of the proposed method is illustrated using examples from an image database of general purpose images, and is shown to produce good results.

*Keywords*—Image Similarity, color properties, texture properties, region, genetic algorithm.