

Evolutionary algorithm for content-based image search

Autores

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Abstract

Content-based image retrieval systems attempt to provide a means of searching for images in large repositories without using any information other than that contained in the image itself, usually in the form of low-level descriptors. Since these descriptors do not accurately represent the semantics of the image, evaluating the perceptual similarity between two images based only on them is not a trivial task. This paper describes an effective method for image recovery based on evolutionary computing techniques. The results are compared with those obtained by the classical approach of the movement of the query point and the rescheduling of the axes and by a technique based on self-organizing maps, showing a remarkably higher performance in the repositories.

Palabras clave

Image recovery, IGA, Genetic algorithm