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"Recuperação de Imagens em Banco de Imagens por Semelhança de Cor"

The most recent revolution in the world of computing is the multimedia revolution. The alphanumeric processing begins to be substituted for the visual information. In the course, the evolution of new techniques of computer vision, imaging processing, data communication, psychophysics and computer graphics, together with the modernization of the hardware, have contributed to very usuful practical solutions. Techiniques to work with images are being developed by researchers of the most diverse areas of science and technology. The new field of Visual Information Retrieval Systems emerges from the necessity of controlling and recovering images in archives with million of daily produced digital images. This work has the objective to: a) develop methods for determination of the similarity between colorful images based on color histograms; b) implement techniques for image recovery based on its color contents; the model of recovery is"query by sample"the user presents an image as an example to the system and desires to recover all the images from an image database that are perceptually similar; c) analyze and evaluate the conbinations of color spaces x metrics to compare performances; and d) introduce a simple prototype system that computes feature descriptors and performs queries though the Internet. Advise on experimental comparison among the use of color space, metrics and quantization level on retrieval by color similarity systems have been established.