Abstract

This paper proposes an automated system for rotation and scale invariant color logo recognition. Colored logo images are recognized using one shape feature namely Moments Invariant and a color feature namely Color Moments. Shape of the logo is modeled using the first two central normalized Hu's invariant moments while color is modeled using the mean, standard deviation, skewness and kurtosis calculated from the color channels. Each image is scaled and rotated by arbitrary amounts before being submitted to the recognition engine. Classification is done using Manhattan and Euclidean distances. Experimental verification is obtained using a data set of 900 images divided into 75 classes. The proposed approach is highly scalable and robust providing accuracy results comparable to the state of the art.

References

Automated Color Logo Recognition System based on Shape and Color Features


Index Terms

Computer Science

Image Processing

Keywords

Logo Recognition  Moments Invariant  Color Moments  Rotation and Scale Invariance.