Abstract

In this paper, we describe a color segmentation based on the normalized RGB chromaticity diagram to extract the symbols and characters of road guidance signs. The proposed method separates blue color of the signs by utilizing the developed histogram on the normalized RGB chromaticity diagram for selecting the threshold automatically. The image morphology operator and the histogram projection technique are employed to extract the symbols and characters. From the experiments on the real scene images, the extraction rate of 97.3% is achieved.

Reference


**Index Terms**

Intelligent Systems  
Image Processing

**Key words**

Color segmentation  
normalized RGB chromaticity diagram
objects extraction

guidance signs