

Exploring some methods for image segmentation by color in Matlab

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Abstract: In this study, we will explore and evaluate several popular methods for color-based image segmentation in the MATLAB programming environment. The topic context is chosen due to the necessity of efficient image processing in many practical applications such as healthcare, industry, and entertainment. The main objective is to build a highly automated system for accurate image segmentation by applying previously studied algorithms. The approach combines theory on color signal processing with experimentation in MATLAB to ensure applicability and effectiveness. The expected result is to provide a new solution for color-based image segmentation, making a significant contribution to the field of image processing.

Keywords: Image segmentation, Color method, MATLAB, Digital medicine, Industrial application