The Identification and Analysis of Lesion in Endoscopic Image

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ABSTRACT

The main purpose of “ the Identification and Analysis of Lesion in Endoscopic Image ” is to provide information concerning identification of endoscopic lesions, by making use of the high speed computing capability of computers and taking the distorted images from wide angle lens, through adjusting programs and incorporating image processing techniques and knowledge. The main purpose of “ the Identification and Analysis of Lesion in Endoscopic Image ” is to make use of the high speed computing capability of computers, take the distorted images from wide angle lens , through adjusting programs and incorporating image processing techniques and knowledge, and provide information concerning identification of endoscopic lesions. The research concentrates on endoscopic images, establishing a complete image managing process which includes investigation of color model transformation, counting of histogram, selection of image filter, edge detect , region grow , conversion of binary image, and the application of morphology. By setting up regions with distinct differences before the image managing process, images are divided and a clear-cut boundary is formed to provide identification of lesions in endoscopic images. All the images used in this research are unprocessed images. Through the examination of computer vision and premium image processing procedures, lesions are correctly identified and used as references for doctors ’ prescriptions. Key words: histogram, image filter, edge detection, region grow, binary image , morphology

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