

Universiti Teknologi Mara

Texture Segmentation Using Entropy Filtering

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ABSTRACT

Nowadays, there are so many prostate cancers among American men and is the second leading cause of deaths from cancer. Prostate cell segmentation is a process of identifying abnormal cell based on texture. This prototype is developed specially to segment abnormal cell from normal cell. It is hard to differentiate between the normal cell and abnormal cell because there are located close to each other. Both cells and neighboring cells have almost exactly similar intensities, thus making it hard to distinguish. To solve the problem, entropy filtering method is used to segment this prototype and using thresholding technique with morphological enhancement to extract the abnormal cell. Experiments are conducted and the prototype system is tested with 10 samples. Finally, the stages ended with the evaluation where the prototype is being tested to yield the output and results. Results from the experiments showed that the prototype system managed to perform segmentation. Therefore, this prototype will give benefits and significance towards the analysis of the cells.

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