Universiti Teknologi Mara

POOR DNA FINGERPRINT IMAGE ENHANCEMENT USING ADAPTIVE CONTRAST ENHANCEMENT

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ABSTRACT

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This paper describes about a poor DNA fingerprint image enhancement using Adaptive Contrast Enhancement (ACE). This technique is used for this DNA fingerprint image in order to get a better and clearer image. It will stretch the details in dark areas and improving overall contrast in brighter areas of an image. The image has to be converted into grayscale image first before enhance it. Several processes has to be go through in order to get the result which is dividing the histogram of the luminance into dark, mid and bright areas, the regions processed independently by using Histogram Equalization, toned down the image depending on the shape of each region and taking a weighted average of the input with the Histogram Equalization output. The result will be the histogram of the image is stretching wisely and the contrast of an image is good where the dark areas stretch the details of an image nicely and the bright areas improved.

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