**DUALISTIC SUB-IMAGE HISTOGRAM EQUALIZATION (DSIHE)**

This is a novel histogram equalization technique in which the original image is decomposed into two equal area sub-images based on its gray level probability density function. Therefore two sub-images are equalized respectively. At end; get the result after the processed sub-images are composed into one image. The fact that algorithm can not only enhance the image visual information effectively; but also constrain the original image's average luminance from great shift. It makes this possible to be utilized in video system directly.

Reference:

<https://www.academia.edu/11451051/A_Dualistic_Sub-Image_Histogram_Equalization_Based_Enhancement_and_Segmentation_Techniques_with_NN_for_Medical_Images>