امیر شکری

کد دانشجویی : 9811920009

دانشگاه سمنان — ارشد هوش منصوعی

جناب آقای دکتر فرزین یغمایی
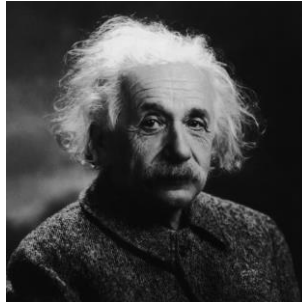
تصاویر :

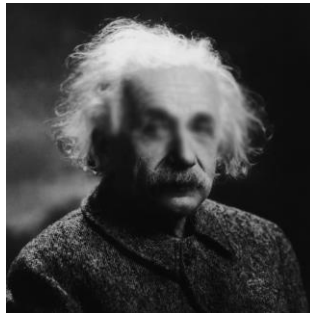*Image refrence : einstein.bmp*

Image two (blur eye) : einstein_blur_eye.bmp
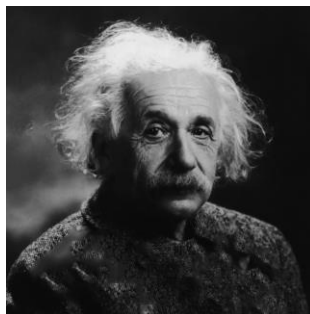

Image two (coat damage) : einstein_coat_damage.bmp
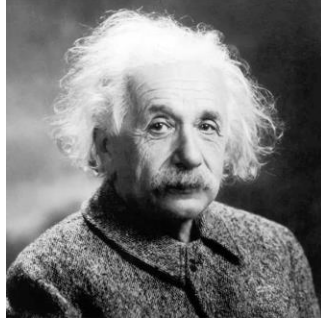
Image two (histogram change) : einstein_histogram_change.bmp

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فرمول :

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$$mse = \frac{\sum_{i=1}^{x_{bound}} \sum_{j=1}^{y_{bound}} \left(image_{ref} - image_{tow}\right)^2}{x_{bound} * y_{bound}}$$

$$(w)mse = \frac{\sum_{i=1}^{x_{bound}} \sum_{j=1}^{y_{bound}} w_i \left(image_{ref} - image_{tow}\right)^2}{x_{bound} * y_{bound}} \;,\; w_i = \sum_{i=1}^{x_{bound}} \sum_{j=1}^{y_{bound}} \log\left(image_{ref} + 1\right) + 1$$

$$PSRN = 10 * Log\left(\frac{L^2}{mse}\right)$$

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نتیجه ی MSE و PSNR :

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Image ref : Einstein .bmp Image two : einstein_histogram_change.bmp	Image ref : Einstein .bmp Image two : einstein_coat_damage.nmp	Image ref : Einstein .bmp Image two : einstein_blur_eye.bmp
MSE : 4505 PSNR : 11.6279	MSE : 95 PSNR : 28.3876	MSE : 28 PSNR : 33.6932

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نتیجه ی WMSE و PSNR :

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Image ref : Einstein .bmp Image two : einstein_histogram_change.bmp	Image ref : Einstein .bmp Image two : einstein_coat_damage.nmp	Image ref : Einstein .bmp Image two : einstein_blur_eye.bmp
MSE : 12112 PSNR : 7.3326	MSE : 256 PSNR : 24.0824	MSE : 82 PSNR : 29.0267