عنوان مقاله:

Comparison of Cycle-GAN and Auto-Encoder in Brain MR Image Super Resolution

نویسندگان:

Fardad Ansari - *Faculty of Biomedical Engineering, Sahand University of Technology*

Sebelan Danishvar - *Department of Electronic and Computer Engineering, College of Engineering, Design and Physical Sciences, Brunel University, UK. Sebelan*

خلاصه مقاله:

Due to some limitations in medical image acquisitions, such as low radiation dose, immobility of patient for a long time during the imaging process, and the diagnostic quality of the medical image itself, generating Super-Resolution Image studies in medical image processing is significantly vital. Many image restoration techniques have changed from an analytical point of view to machine learning-dependent methods. We testify two famous machine learning models that are so significant in the reconstruction of the image data, Cycle Generative Adversarial Neural Network (CGAN), and Autoencoder (AE) in Super-Resolution of brain MR images. For quality assessment of reconstructed images, we use the Mean Opinion Score (MOS). The results show CGAN reconstructed images better than AE.

کلمات کلیدی:

Super Resolution, Cycle GAN, Autoencoder, MR images

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