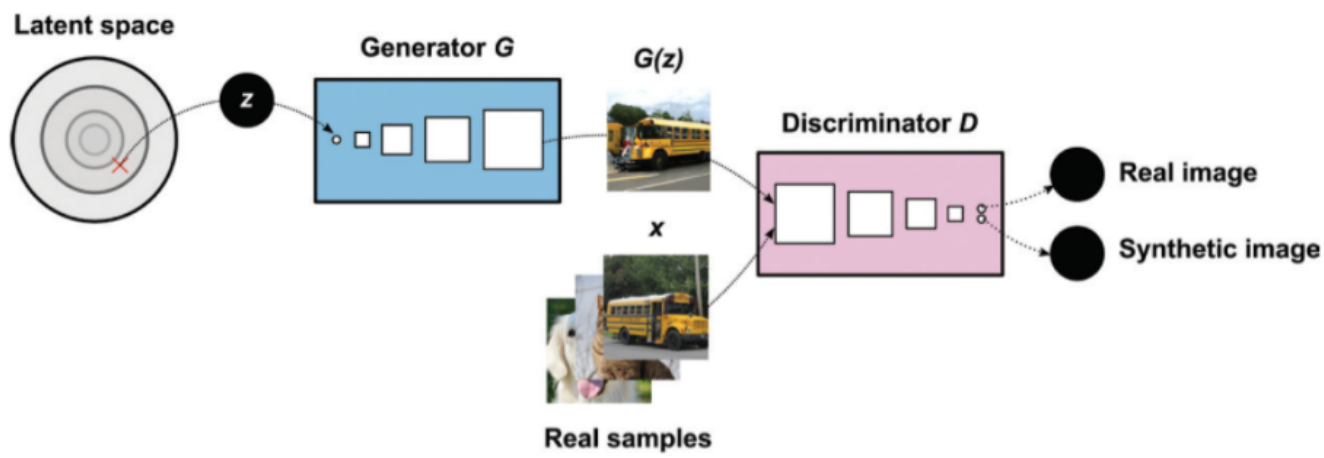
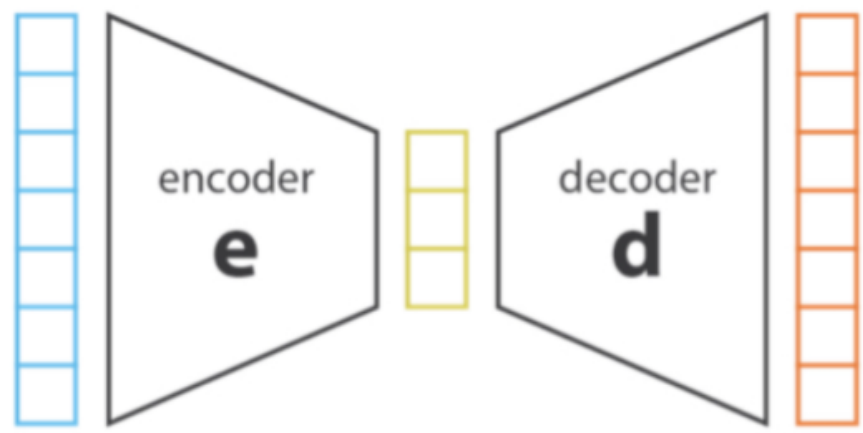
Redes Neurais Generativas

Conheça as principais aplicações na saúde

O que são?

Redes neurais em que a sua saída são novos dados.





x

initial data
in space R^n

e(x)

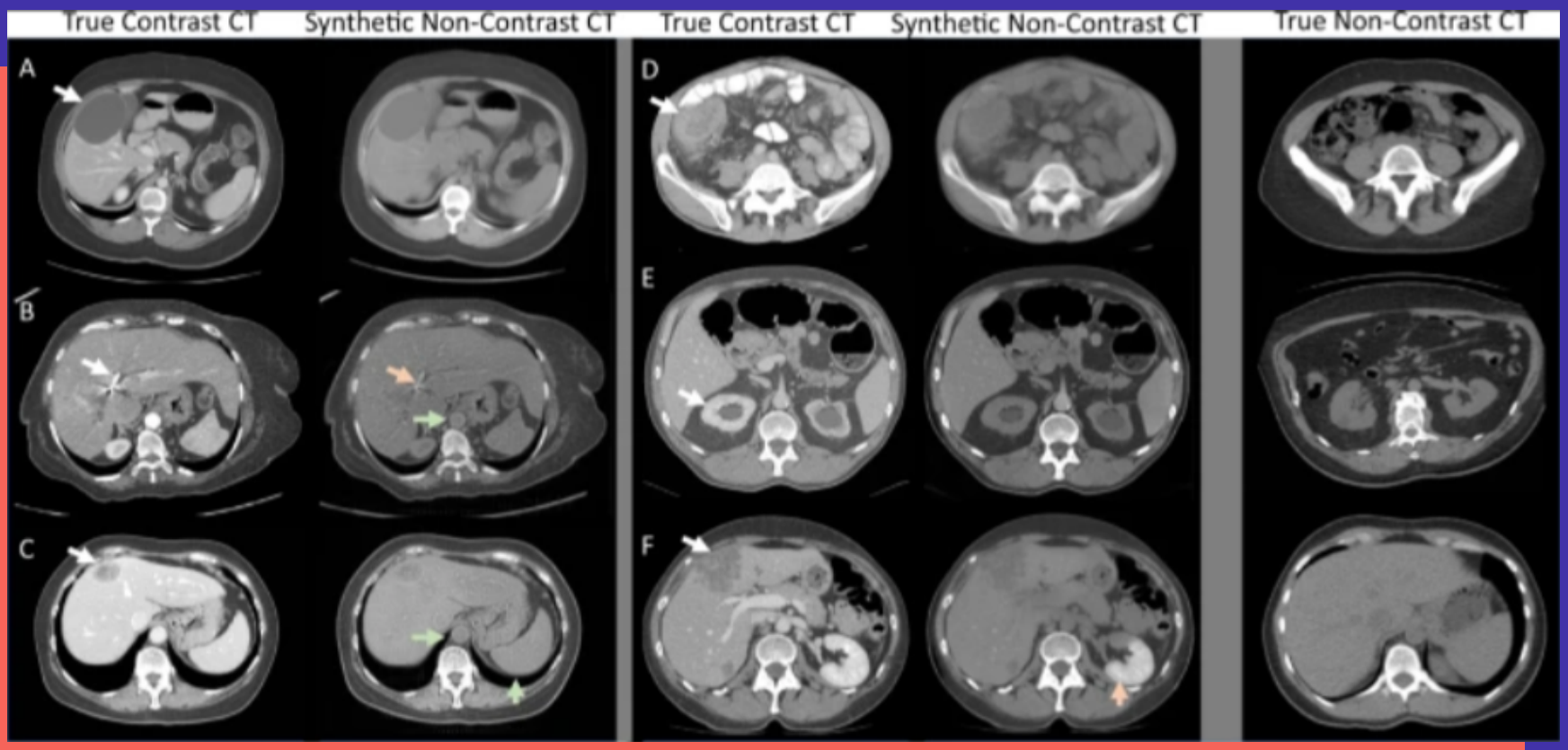
encoded data
in latent space R^m (with m<n)

d(e(x))

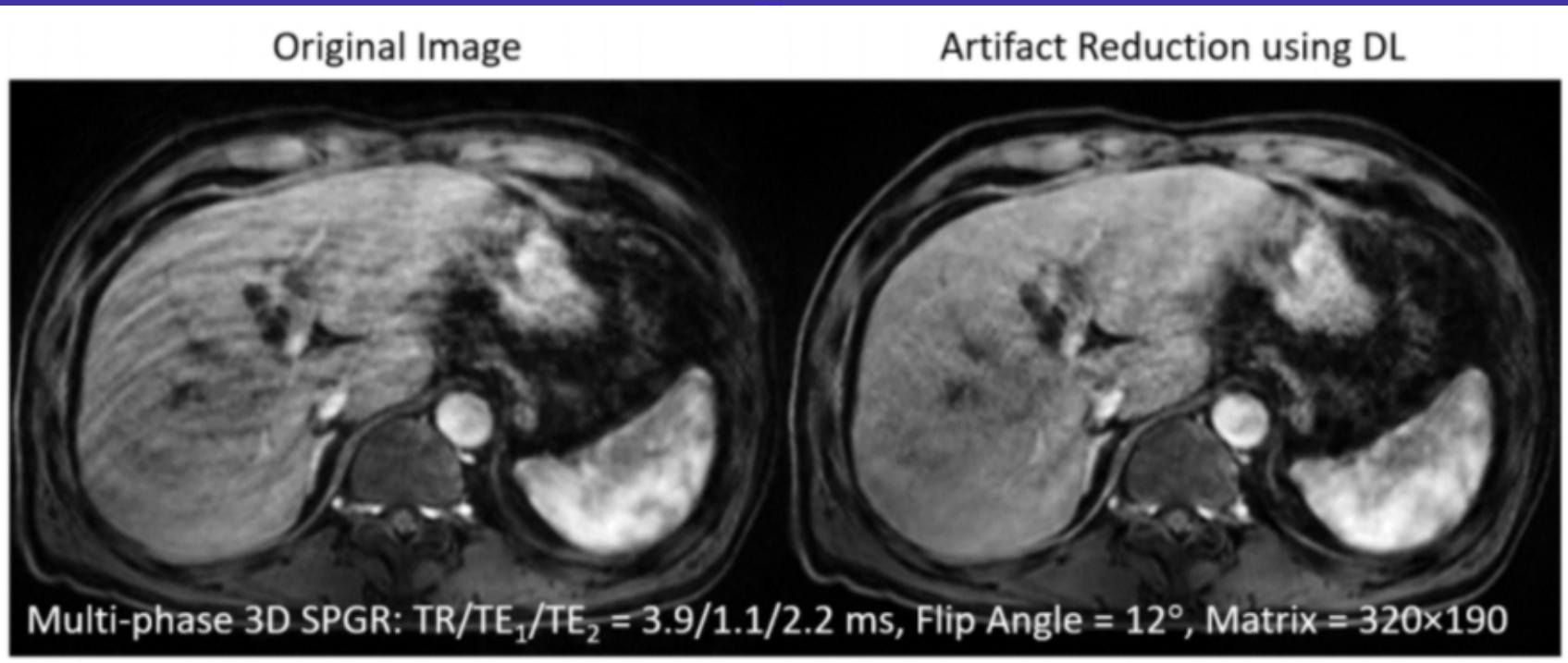
encoded-decoded data
back in the initial space R^n

Conheça as principais aplicações na saúde

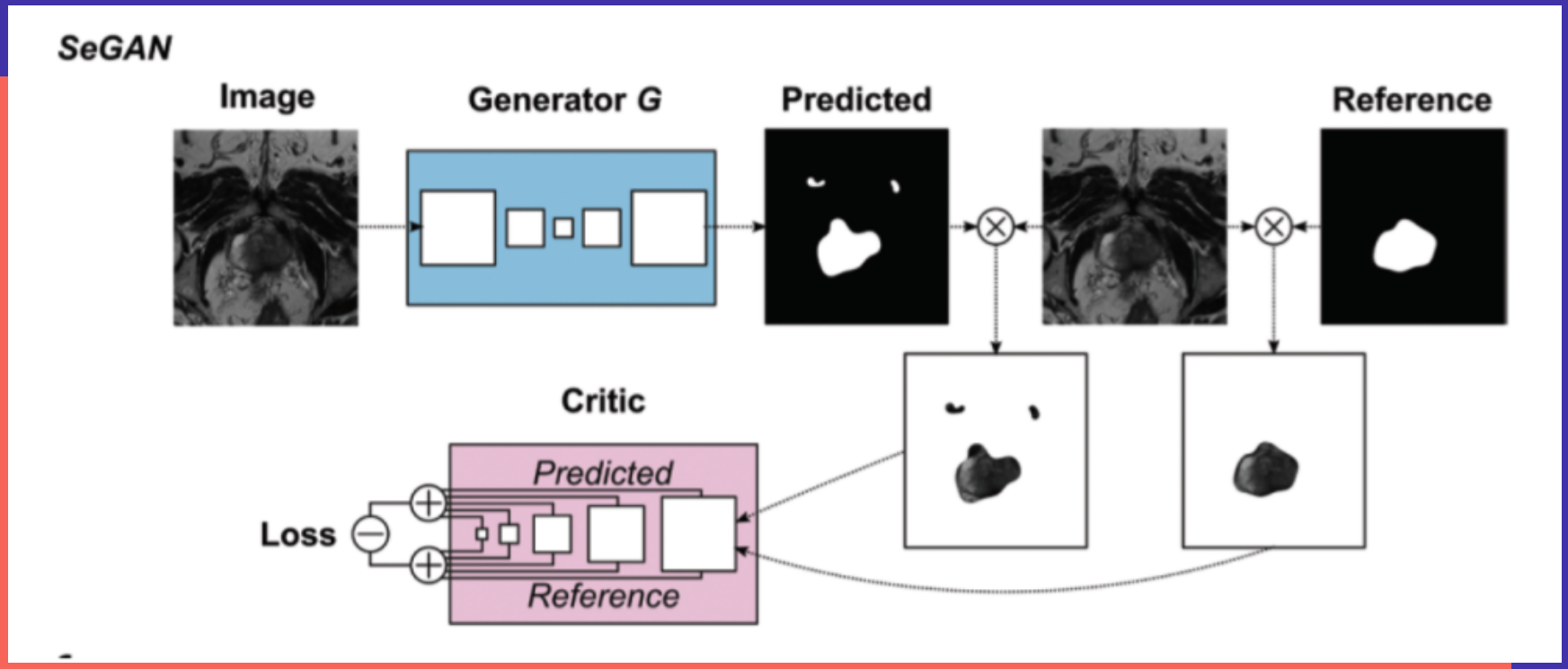
1 Síntese de novas imagens



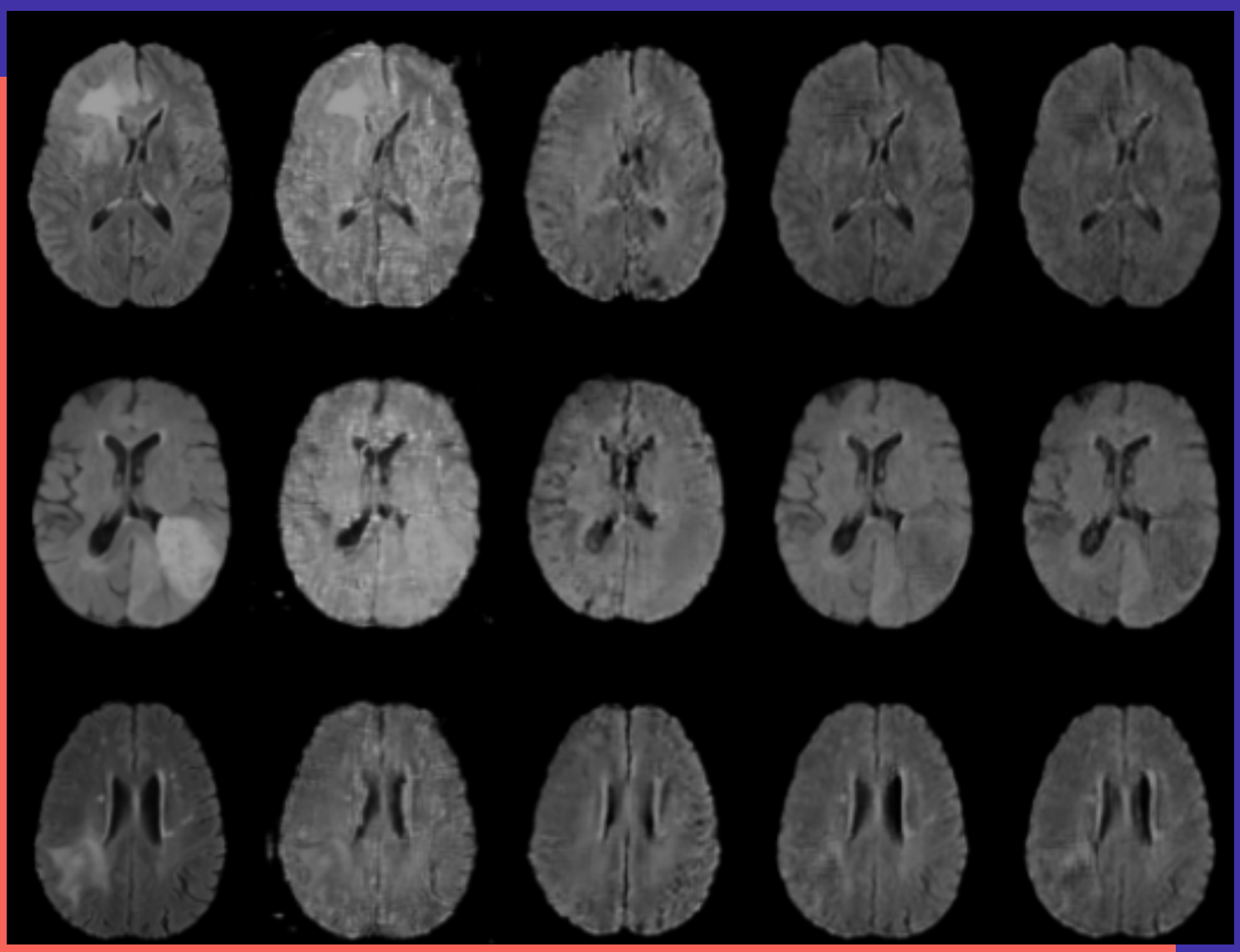
2 Reconstrução de Imagens



3 Segmentação de imagens

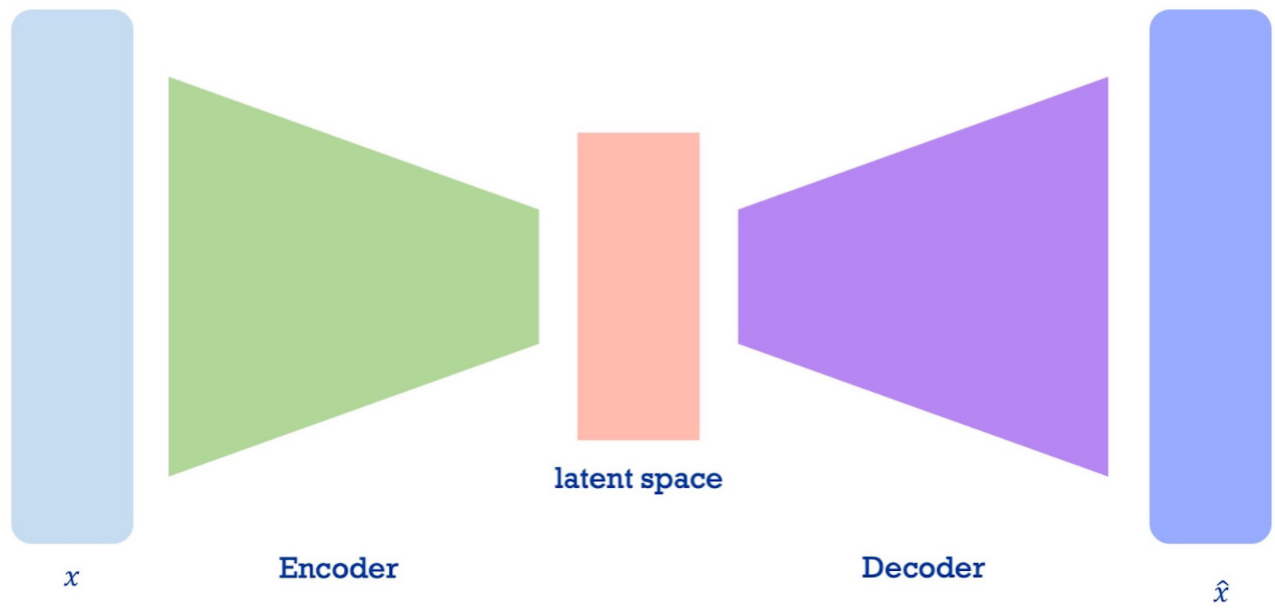


4 Pseudosaudável

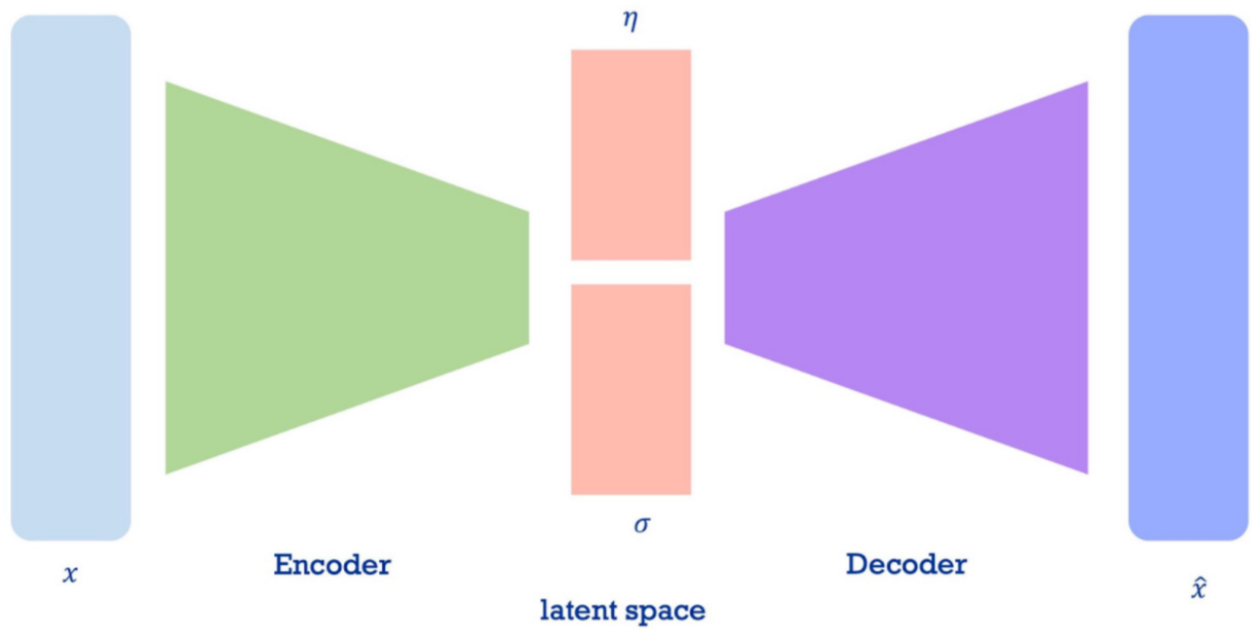


Revisão rápida das arquiteturas:

Autoencoder



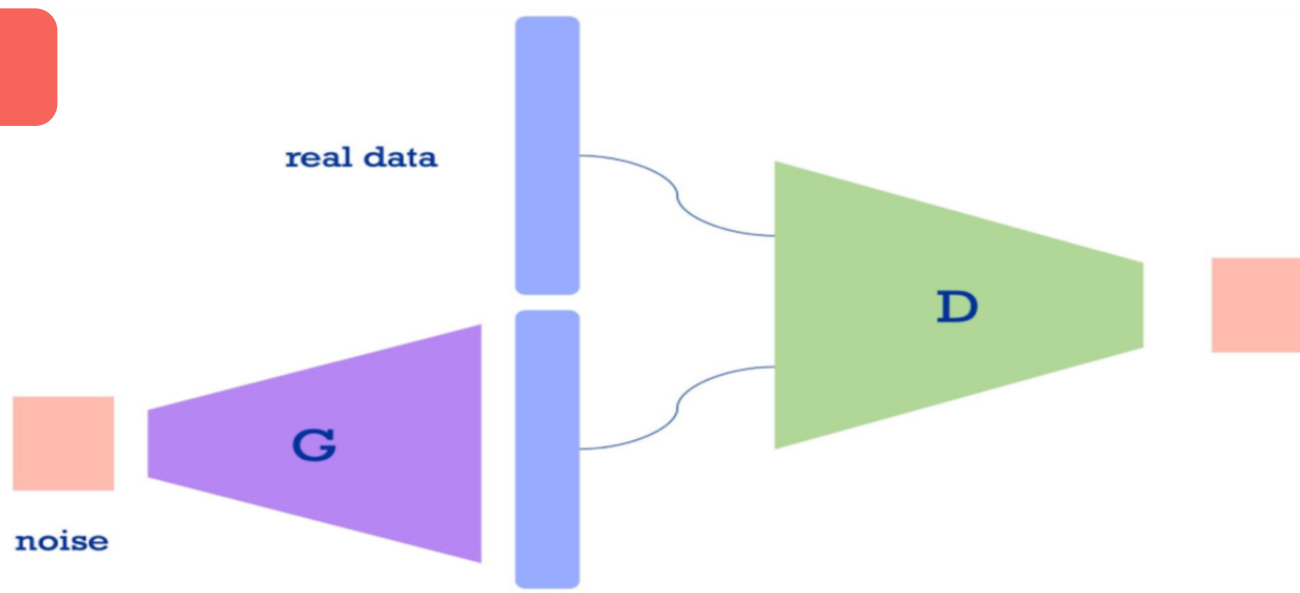
Autoencoder Variacional



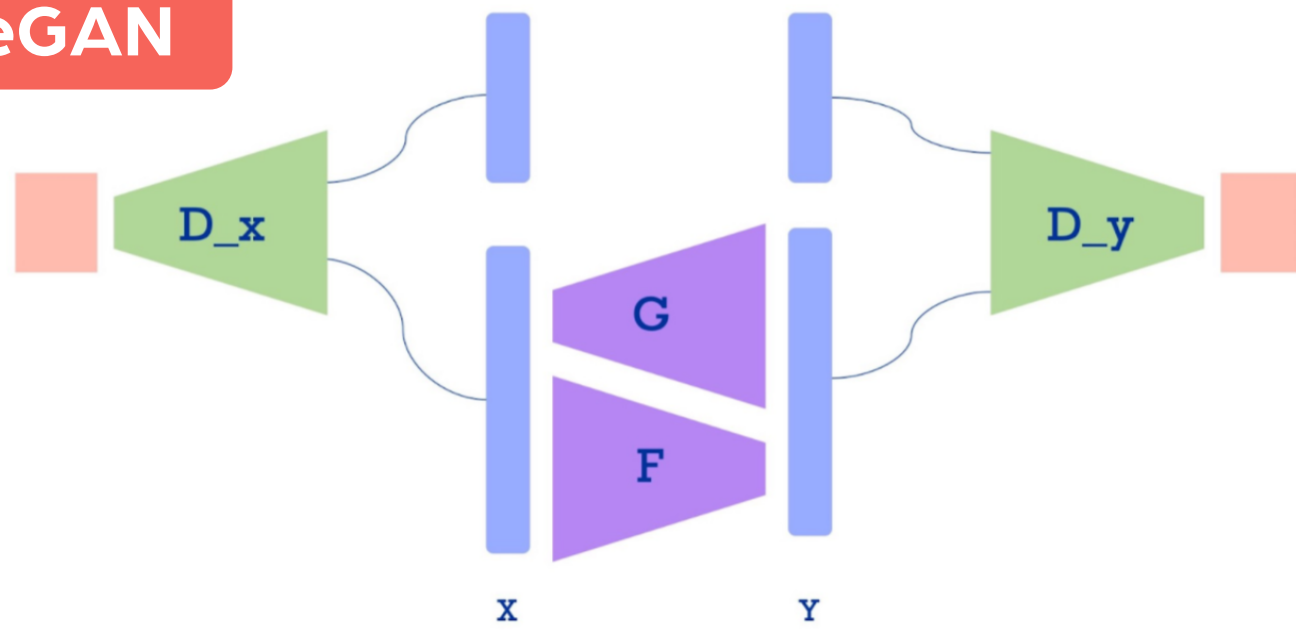
Continua >>>

Revisão rápida das arquiteturas:

GAN



CycleGAN



Curtiu o estudo?

Referências:

- Generative Adversarial Networks: A primer for Radiologists
- Deep Learning Book Data Science Academy
- Data augmentation using generative adversarial networks (CycleGAN) to improve generalizability in CT segmentation tasks – Scientific Reports
- Review: Noise and artifact reduction for MRI using deep learning – Daiki Tamada , Arxiv
- MRI–Only Based Synthetic CT Generation Using Dense Cycle Consistent Generative Adversarial Networks
- Generative Adversarial Networks: A primer for Radiologists
- Adversarial Pseudo Healthy Synthesis Needs Pathology Factorization
- Towards Data Science: Generative Networks: From AE to VAE to GAN to CycleGAN

Curta se gosta desse tipo de post

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