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(54) Title of the invention: METHOD AND SYSTEM FOR PROVIDING GENERATIVE ADVERSARIAL NETWORK FOR **IMAGE AND TEXT SYNTHESIS**

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(57) Abstract:

METHOD AND SYSTEM FOR PROVIDING GENERATIVE ADVERSARIAL NETWORK FOR IMAGE AND TEXT SYNTHESIS ABSTRACT The present invention relates to the use of Generative Adversarial Networks (GANs) for generating images and associated text. The invention includes a computer-implemented method and system for training a GAN with a generator network and a discriminator network using a dataset of images and associated captions, and generating a synthetic image and corresponding caption using the trained generator network. The invention enables the generation of realistic images and text that can be used for a wide range of applications, including computer vision, natural language processing, and image and text retrieval. The invention provides a significant improvement over previous image and text synthesis methods, by generating more realistic and diverse outputs that closely resemble the training data. The invention can be implemented on various computing platforms and can be adapted to different domains, making it highly versatile and scalable.

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