

# Image Generator Using Gan

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**Abstract:** *This paper explores the application of GANs, which are machine learning models, toward the art of generating artistic images. Our research evaluates the effectiveness of GANs to generate simple yet creative art through the synthesis of different image patterns and comparison of their quality to serve as a reflection of artistic expression. Various GAN architectures-from StyleGAN to DCGAN-are explored in the research to effectively produce aesthetically pleasing images at different levels of complexity. Metrics such as Inception Score (IS), Fréchet Inception Distance (FID), and human evaluative feedback are used to analyze the models, and our results show that adversarial training strategy of GANs excels in producing images that resemble art closely, indicating they can be applied more broadly in AI-artistic content creation.*

**Keywords:** Generative Adversarial Networks, GAN, Convolutional Layers, Image Generation, Artistic Image Synthesis, Layer Optimization, Machine Learning