

# Image colorization

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**Abstract.** Artificial neural networks is a widely popular class of machine learning algorithms, which has shown exceedingly well results in solving image and text processing tasks. [2] With the advent of deep learning era we can attempt to solve complex inverse problems, in which we learn the parameters of a neural network using the available data. In this paper we propose an approach for solving an image processing problem – colorization of grayscale photographs. We describe the GAN (Generative Adversarial Networks) framework introduced for image generation [1]. Specifically we focus on conditional GANs for solving grayscale-image-to-color-image translation problem [3]. Our approach allows us to obtain plausible color images through an end-to-end framework.

**Keywords:** machine learning · neural networks · image processing · generative adversarial networks

## References

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