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Image Colourization using Clustering Technique

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Abstract: *Colorization of grayscale images has become a more researched area in the recent years, thanks to the advent of K-mean clustering networks. We attempt to apply this concept to colorization of real images obtained from video sequences. Previous similar research focused mainly colorization of natural images, while colorization of real is traditionally done by leveraging manual scribble methods. Our proposed method is a fully automated process. To implement it, we propose and compare two distinct K-mean clustering architectures trained under various loss functions. We aim to compare each variant based on results obtained as individual images.*

Keywords: Gray scale, Pixel, Automatic color image, K-mean clustering, Python, NumPy, OpenCV.

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