# RECOLORED IMAGE DETECTION VIA A DEEP DISCRIMINATIVE MODEL

**Batch: A10**


## ABSTRACT

Image recoloring is a technique that can transfer image color or theme and result in an imperceptible change in human eyes. Although image recoloring is one of the most important image manipulation techniques, there is no special method designed for detecting this kind of forgery. In this paper, we propose a trainable end-to-end system for distinguishing recolored images from natural images. The proposed network takes the original image and two derived inputs based on illumination consistency and inter-channel correlation of the original input into consideration and outputs the probability that it is recolored. Our algorithm adopts a CNN-based deep architecture, which consists of three feature extraction blocks and a feature fusion module. To train the deep neural network, we synthesize a dataset comprised of recolored images and corresponding ground truth using different recoloring methods. Extensive experimental results on the recolored images generated by various methods show that our proposed network is well generalized and much robust.



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