

# Explainable Passive Image Forgery Detection

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**Abstract:** *The technical evolution of the world is conquering; the trust on the digital imaging technology is grinding down. In daily life, peoples come across the tampered or forged images from the tabloid magazines to the business industry. Furthermore in media outlets, scientific journals, political campaigns, courtrooms, and photo hoaxes that land in our email boxes, forged images are appearing more frequently in a unique way unable to identify the fake image with the needed sophistication. The nominal advancement from the film photography to digital photography is feasible boon but it is not trustworthy. The image tampering in the perspective of digital works can be considered as a creative work but there are some cases where the tampered images are being maliciously abused. Such critical condition arises where images seems to be the proof for the medical reports, crime scenes etc. where the forged image results in patients death and escape of the criminal respectively. The forging of the original image leads to illicit distribution, which raises the data famine problem. In research filed, the data owners are cautious about publishing their images without ownership and copyright which reduced the data availability for the researchers. Likewise, many problems arose in different fields because of the image forging.*

**Keywords:** Digital Forgery, Image Forgery, CNN

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