Abstract

Images have power, images strongly influence society. Most people tend to believe news that is presented with pictures compared to news that is only presented with text only. As with Neil Armstrong's image as the first human to set foot on the moon.

The emergence of digital image software that can edit images allows people to convey other meanings of an image. Unfortunately, many modified images are presented and accepted by the public as "real". Therefore, it is important to ensure the authenticity of an image.

In this study, the author tries to analyze the authenticity of images in JPEG format seen from the metadata. JPEG was chosen because despite the huge reduction in file size, JPEG images maintain good image quality. The analysis begins by comparing the EXIF metadata from the original image and the edited image, then the difference is seen. After the analysis, it turns out there is a difference between the original image metadata and the edited image metadata. But apparently the metadata from a JPEG image can be modified. The result of this study is that metadata can prove whether digital images are original or have been changed by image editor software.

Keywords: metadata, JPEG, digital forensics.