

The Effects of Light Intensity on Tracing Digital Image into Vector Image

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Abstract

This paper aims to study the effects of light intensity on the digital image production, and therefore the accurate reproduction of details when tracing this digital image to the vector image.

The paper used experimental and analytical methods to study the light intensity as the independent variable through the dependent variables "lens aperture, sensitivity speed (ISO)" and shutter speed. Next, the digital images obtained from the experiments were auto traced to vector images. Then, the results were measured and analyzed.

While the results were identical to the hypotheses related to lens aperture and sensitivity speed (ISO) experiments, the shutter speed experiment results did not match the hypothesis: there is no change in the details of the vector image created through the variables shutter speed in the digital image. Therefore, using fast shutter speeds is recommended to increase the accuracy of the vector image details produced through the digital image.

Keywords

light intensity; Image trace; digital image; vector image; photography.