

## **A Way of Converting Color Images to Gray Scale Ones for the Color-Blind: Applying to the part of the Tokyo Subway Map**

**Authors :** Katsuhiko Narikiyo, Shota Hashikawa

**Abstract :** This paper proposes a way of removing noises and reducing the number of colors contained in a JPEG image. Main purpose of this project is to convert color images to monochrome images for the color-blind. We treat the crispy color images like the Tokyo subway map. Each color in the image has an important information. But for the color blinds, similar colors cannot be distinguished. If we can convert those colors to different gray values, they can distinguish them. Therefore we try to convert color images to monochrome images.

**Keywords :** color-blind, JPEG, monochrome image, denoise

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