

Abstract

Color deficiency, popularly known as color blindness, is a term that refers to the difficulty to distinguish shades of color, or blind to certain colors. This is due to the inability of the cone cells in retina to apprehend a certain color spectrum. Until now, human's color deficiency can not be cured. In dichromate color deficiency, or partial color blindness, patient can still see colors, but there are colors that will look same in their sight. Although in reality the colors are quite different.

The inability of color deficiency patient to distinguish color shades may interferes patients in receiving colored visual information. However, it can be helped by an application on android devices. This application will process the image in real-time, especially colors, from image captured by the camera so that people with dichromate color-deficiency able to receive visual information properly, although they still can not distinguish the color shades. By utilizing android platform that commonly used in public, of course this application will be easy to reach people with dichromate color-deficiency, and helps sufferers from the things that constraint them.

Keywords: color deficiency, dichromate, android, camera, image processing.