Enhancement of Images for Colour-Deficient Observers

This document summarizes the methods used to enhance images in order to be easily recognized by colour-deficient observers. They are classified into three major categories: recolouring, edge enhancement and pattern superposition; pros and cons are discussed. The document provides recommendations on how to choose an enhancement method for a specific application with the proviso that there is no unique technique covering all cases. Besides it describes some evaluation methods of the enhancement techniques to be proposed in the future. Three types of test images (a natural scene, a scientific visualization and an office document) are provided for the evaluations.

The publication is written in English, with a short summary in French and German. It consists of 63 pages with 40 figures and 7 tables and is readily available from the CIE Webshop or from the National Committees of the CIE.

The price of this publication is EUR 135,- (Members of a National Committee of the CIE receive a 66,7 % discount on this price – please approach your NC for information on accessing this discount).