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COLOR DETECTION IN AN IMAGE

USING OPENCV AND PANDAS

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ABSTRACT:

Colour identification is a process, which involves, executing of a software program / application and finding all colour values of individual pixels in a picture/ so that the result will be name of the exact colour of that pixel , identified by intricate calculations . The calculations involves comparing the RGB values of the pixel provided by the JPG or PNG to the values in the CSV file attached with the python program. The CSV file has 865 colour palette names. There are different levels of calculations that depend upon the JPG. This program plays important part in the modern monitor production. The colour correction and checking is an important process where our software can be used. This can also be used during colour calibration. Quality assurance in software testing is defined as a procedure to ensure the quality of software products or services provided to the customers are effective and user friendly. The main advantage of this program is that it can work independently provided with JPG or PNG file, this doesn't need internet or AI (Artificial intelligence) to work. This program works completely on mathematical process. This can be highly reliable and accurate since it involves simple mathematical process. This has other applications such as food & beverage processing, Automobiles, colour production, paints textures etc. We can also add a TEXT TO SPEECH add-on to make things easier on industrial level. This paper discusses the main characteristics of a Colour detection program and its advantages.

Keywords: Color identification, opencv, color calibration, pandas.