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Colour Detection using Python and OpenCV

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Abstract: The aim of color detection is to identify and extract specific colors or color ranges from an input image or video stream. The Python programming language provides a rich set of libraries and tools, and OpenCV (Open Source Computer Vision Library) is one of the most popular libraries for computer vision tasks. OpenCV offers various functions and algorithms for color image processing, making it an excellent choice for color detection applications.

Keywords: color detection

REFERENCES

- [1]. R. S. Berns, "principles of color technology" (3rd edition new york: wiley, 2000)
- [2]. yang, f., lu, h., zhang, w., yang, g.: 'visual tracking via bag of features', iet image process., 2012, 6, pp. 115– 128 (doi: 10.1049/iet-ipr.2010.0127)
- [3]. hasting, g. &rubin, alan. (2012). Color spaces a review of historic and modern color models*. African vision and eye health. 71. 10.4102/aveh.v71i3.76.
- [4]. behicguven. Building a color recognizer in python. Towards data science. <u>Https://towardsdatascience.com/building-a-color-recognizerin-python-4783dfc72456</u>
- [5]. g.m.Snoek, "evaluating color descriptors for object and scene recognition", ieee transactions on pattern analysis and machine intelligence, vol. 32, no. 9, september 2010
- [6]. Claudia nieuwenhuis, "spatially varying color distributions for interactive multi label segmentation", ieee transactions on pattern analysis and machine intelligence, vol 35, no. 5, may 2013
- [7]. Kok -meng lee, "effects of classification methods on color-based feature detection with food processing applications", ieee transactions on automation science and engineering, vol. 4, no. 1, january 2007
- [8]. g. Wyszecki and w. S. Styles, "color science: concepts and methods, quantitative data and formulae" (2nd edition new york: wiley, 1982)
- [9]. berns, rs&reiman dm, "color managing the third edition of billmeyer and saltzman's principles of color technology", color research & application, vol.27, no.5, (2002), pp.360-373

