

The background is a dark blue field filled with various colorful geometric shapes, including circles, ovals, and elongated rectangles in shades of teal, green, brown, and red. A white, hand-drawn rectangular border with slightly irregular edges frames the central text area.

COLOR BLOCK

mobile app

LEGALLY BLIND

- Color blindness affects 8 ~ 10 % of the population
- Multiple types exist, most are mild
- If you've never seen color, how can you tell you have a problem with colors?
- Insecurities





FORGET COLORS

- Subject to ridicule
- Reading maps and graphs
- Identifying traffic lights and signs
- Judging food
- Can't dress or wear makeup properly !



SIRI, HELP !

- Mobile APP
- Allows for color matching of clothes
- Science based !
- Dependent on *Color theory*

HOW TO USE ?

- Specify the no. of clothing items
- Upload the images of clothing items
- The app determines if the colors are a good match

HOW TO IMPLEMENT ?

1

Read image then convert to HSV

2

Object detection for clothing item

3

Color detection for object / clothing item

4

Color-matching based on HUE angles and color theory

REFERENCES

- [Color Blindness | National Eye Institute \(nih.gov\)](#)
- [Clothes and make-up - Colour Blind Awareness](#)
- [15 Difficulties Every Colorblind Person Face With \(colorblindguide.com\)](#)
- [I'm color blind, with a real bad taste for fashion. How can I properly dress myself, what colors would match with each others? - Quora](#)
- [Colorblind Men and Clothing | How To Build A Wardrobe When You Can't Distinguish Color \(realmenrealstyle.com\)](#)
- [Choosing Clothes For Colorblind People \(colorblindguide.com\)](#)

THANK YOU

