

Chapter 5

5.1 Conclusion

In this research the fuzzy logic is used to implement a color detection algorithm using a predefined dataset that content a lookup table with corresponding color names. The colors of the image are compared with the lookup table and the result of the comparison is achieved if the values of the image colors are identified in the lookup table which matches the desired color to be detected by specifying the color name. in addition to three other function; most dominant color detection, HSV and HSI color models conversion, and 3D histogram illustration. The results show that the implementation was efficient and it satisfies the main objectives of the project.

HSV is only “better” than HSI for machine vision and HSL is outright better for “paint” applications or any other where you need a human to “set”, “enter” or otherwise.

5-2 Recommendation

The fuzzy logic has to be the basic of machine learning methods and it's recommended for those who wants to understand the basic idea of supervised machine learning, it's also recommended to be used with MATLAB environment which offers all the necessary tools and function for extract numerical value for color features in future.