

ABSTRACT

The image can be either pictures or photos is one of many way that is very often used to capture an event that will be remembered for a long time. Photos taken are not all planned in advance. There is a possibility at the time wanted to take a picture or photograph the weather conditions are not as good as we want, so that pictures or photos that we take will have an unsatisfactory quality. Not all events can happen every time and not every scenery will be the same at different times. This is what makes the idea to create a system for those who do not have much time to take outdoor pictures or photos.

In this research, has designed a system that capable of eliminating noise, haze effect. From the input image the system will be looking for the noise layer using the Dark Channel Prior method. Which is a black layer of the input image and will be put through several processes, including the soft matting so as to produce a coating which is considered as noise or haze layer from the input image. Software that used in this research is Matlab R2009a.

The output obtained is an image that has been seperated with the haze effect with a better quality. By using slide window size between 10 and 20, intensity of disappearances between 0.9 and 1, and t_0 values between 0.2 and 0.4 then the output from the system has a better quality. With an PSNR value of 13.35 dB, the CC value is 0.84, and computational time 19.59 seconds.

Keywords : Haze, Digital Image, Dark Channel Prior, Soft Matting