

ABSTRACT

Catchlight is a reflection in front of the eye which is reflected by itself. Because the eye contained water that can reflected the light in front of it. From the reflection, the light direction information can be obtained. With the use of catchlight in a photograph, the direction of the light used in front of the eye can be known. The result analysis of lighting diagram determination information can be used for help people learning studio photography, which often used as a lighting direction guide.

For analyzing catchlight in a photograph, the image processing technology used was : eye detection, iris area segmentation, and catchlight analysis. Eye detection used for finding eye area for catchlight analysis. Iris area segmentation used for limiting catchlight location in iris area with circle hough transform method. In the catchlight analysis process, the catchlight location towards the center point of iris coordinate will be determined.

From the result of implementation and test of the system, Sistem can reach 60% success rate of 130 sampling with time proces abaout 3 minutes for each picture process. This is happen because the metode of eye detection process is too simple and susceptible of bayangan. And for catchlight analysis process, sistem work perfectly to get lighting direction result, that can reach 95% succes rate with time process lessthan 1 minute.

Key Words : Image processing, catchlight, eye detection, irish segmentation, lighting diagram, fotografi, Libor Masek, circle hough transform.