ABSTRACT

Face recognition is a technology that is used in various applications to identify human faces using digital images . Face recognition is executed using the raspberry pi . Raspberry pi will be used as the operating system to run the program . In this research will use a camera module of a raspberry . To use the language python programming language . The method used is realtime content based sample image matching system that is efficient for image processing. This method is used because this method uses Orb faster to get keypoint compared with SIFT and SURF. In the method of realtime content based sample image matching system consists of two algorithms algorithms Orb and Histogram Intersection. Orb algorithms used to perform fast matching and matched again using Histogram Intersection. In this research, the method of realtime content based sample image matching system tested matching faces with various conditions, such as the effect of the resolution, different faces, light, and distance. In this study can be matched up to 98% at a resolution of 640x480 with a limit above the 20 threshold keypoint 0.7.

Keywords : Raspberry pi , face recognition , content-based sample image matching system, Orb