Abstract

Identification of human have done with many ways, one of ways that can assure authenticity is biometrics. One of biometrics method for identification of human is iris recognition. It cause iris have some advantages than another organ, every people have different iris texture, and iris is internal organ that the authenticity is preserved, because iris is protected by eyelid, so that the authenticity of iris is preserved for long time

This final project was had done to evolve iris recognition system for indetifiying human and security system. Identifiying human was had tested by one of three region iris, whereas for security system was had tested by a whole of region iris. The system was had built with Circular Symmetric Filter (CSF) that modifying from Gabor Filter for feature extraction, and k-Nearest Neighbor for classification. This final project also depeloped new method in preprocessing, that is masking iris for segmentation. Masking iris would otomatitation searching pupil region from student of ITTELKOM had depeloved method. CASIA 1.0 eye database image was had used for image database of system. From the testing was had done, the highest accuration for security sistem scenario is 82,22% and for identifying human is about 52%.

Keyword : Iris recognition, Security System, Identification of human, Circular Symmetric Filter, Gabor Filter, masking iris, segmentation, CASIA 1.0