

ABSTRACT

Recent years, human needs to interact each other is increased along with the rapid development in technology and information field. The system which is capable to cover all that needs is biometric system. Biometric system is also known as identification system which is using human features as the input. Beside all of those method, there is a method which is currently developed is human knuckle identification system. Each person has their own unique knuckle pattern. Furthermore, this knuckle based identification system is still a way too difficult to be copied by someone. From those good advantages, author puts the topics about human knuckle identification into his final assignment and do a performance test to it.

In this final assignment, author has implemented Local Binary Pattern (LBP) in the human knuckle identification system as a feature extraction method. In this system, LBP has a rule to gather every feature from human knuckle pattern. Values which is gathered from LBP, will be processed by the system through Logistic Regression classifier to recognize a person identity from knuckle patterns.

From the author's research, system successfully identify people from their knuckle pattern. the system has a good performance which is successfully reached 99,27% in maximum accuracy.

Key Word : Biometric, Human Knuckle Identification, LBP, Logistic Regression.