

ABSTRACT

Rugae Palatine is one part of the human body is located in the oral cavity. Each person has a different characteristic pattern of Rugae Palatine, different patterns can be individual identification, eg to identify of victims of fire that destroyed. Rugae Palatine have the consistent characteristic, is stable throughout life and will not change either the pattern or their characteristics and will be maintained because it is located in the oral cavity.

The rugae mold obtained of Padjadjaran University School of Medicine and Telkom University students. The methode was used in Pattern identification is the Wavelet Transform (DWT) methode and Learning Vector Quantization (LVQ). The results in this final assignment is a system implemented into Android-based applications that can be used in identifying Rugae Palatina pattern on individuals. Background implementation into the android applications is to support flexibility in the devices or systems.

The system has a performance with an accuracy of 85.9682% and computation time of 3.5720 seconds using 37 samples of training image and 15 test images. Becouse of this system, it can be a comparison in rugae palatina identification using different methods and may be useful for the forensic odontology to identifying the Rugae Palatina pattern.

Keywords: *Discrete Wavelet Transform, Rugae Palatine, Learning Vector Quantization*