ABSTRACK

Forensic is a field of science used to assist in the process of identifying individuals and the interests of law enforcement. Many ways to identify an individual, but often because of the physical condition of an individual who is not intact, then do the identification. Forensic dentistry simply can determine a person's identity based on examination of odontology, palatine rugae, finger and lip print pattern. Lip print pattern have distinctive characteristics as well as the comparison of fingerprints.

Lip print pattern have distinctive characteristics as well as the comparison of fingerprint. Lip print pattern have consistent, stable properties throughout life, and will not change either pattern or characteristics. Lip print pattern can be observed since aged 4 months. Sample lip prints was obtained through cooperation with Faculty of Dentistry Padjadjaran University .

This final project is aimed to facilitate the identification and classification of lip print pattern in men and women. The method used for feature extraction is the Watershed and the method used for classification is Support Vector Machine (SVM). using the MATrix LABoratory (MATLAB) application.

The system has a performance with an accuracy 70 % and computation time 25,04 seconds using 35 samples of training image and 10 test images. With this system can be a comparison in the identification of lip print pattern by using different methods and can be useful for the world of forensic odontology in identifying lip print pattern.

Keywords: Lip print pattern, watershed , Support Vector Machine (SVM).