ABSTRACT

Criminality or crime is any thing or action that is unlawful or a crime. Criminal acts committed diverse one of them violence with bites. A common case of bite crime is on both sides of the criminal victim and criminals. There are several examples of crime through bites that are cases of rape, violence, and others.

In the process of identifying crime cases through evidence of bite or bite marks, evidence of bite marks contained in a criminal case is an important proof that can be used in the process of settling a criminal case. According to odontology forensic , from the evidence of bites there is a lot of information to be gotten one of the sexes. In the process of identifying previous criminal cases still using manual way that is by printing bite marks, then drawing into paper for next in analysis is very inefficient and there is distortion in the process that can remove important information that shouldn't look to be lost. Therefore, a needed efficient system of gender identification is required through the use of bites that can assist the field of odontology forensics in the process of settling criminal cases on the basis of bite suspension.

Based on the above problems, a gender identification system was established based on bite marks on image processing using Content Based Image Retrieval (CBIR) method and Learning Vector Quantization (LVQ) classification. The CBIR method is used for feature feature extraction methods. the method of feature extraction used in this research is Local Binary Pattern (LBP).

This Final assignment is designed to facilitate the identification of gender based on bite marks pattern or bite mark on crime action. The system has the performance with the greatest accuracy of 79.16% with a computational time of 1445 seconds using 72 samples of training image and 48 test images. Given this system can be a comparison in gender identification based on bite marks pattern using different methods and can be useful for the world of forensic odontology in identifying gender using a bite marks pattern.

Key Word : CBIR,*LVQ,LBP, Criminal,Bite Mark.*