

## ABSTRACT

*Criminal acts are currently happening in Indonesia. Many ways to do the process of identifying victims or committing a crime one of them using bite marks. Bite marks are a pattern that is formed based on a tooth, food or substrate that is gentle but can be depressed. The field of expertise in dealing with the identification process of bite marks is forensic dentistry (odontology forensic). Bite marks are usually found in victims or doer of criminality, such as in cases of hardness, rape, and others. Bite marks found in the body can be information one of which is gender, because each individual has the characteristics of different teeth. The process of identifying bite marks that have been done now through a long process, thus requiring less efficient time.*

*Based on above problem, in this final project is done system design to do image conversion by using Gabor wavelet method to extract characteristic of bite mark and classified using Decision tree. In data retrieval technique, the samples obtained from the prints on the teeth bite. Then from results are photographed using camera to achieve the best results before using software.*

*In this final project, gender can be recognized and obtained accurate from 89.58% with computation time 2,24 second, with scale parameters ( $u$ ) = 8 and orientation ( $v$ ) = 3, using 80 sample of training image and 48 test images. With this system can be a comparison in the identification of male and female gender using the pattern of bite marks. And can assist the field of dental forensics in the process of gender identification using a bite mark.*

**Keywords:** *Gabor Wavelet, Decision Tree, forensic, Bite marks, odontology forensic*