Abstract

Biometry is an identification technology based on the measurement of human physical characteristics. Biometric is usually used for the introduction of a victim in an accident or natural disaster. Physical characteristics that referred to this case is the human’s teeth. It is because the teeth structure is not easy to damage. There have been some method of identification using dental that uses only one feature, so that method need additional features to improve the rate of accuracy. The purpose of this final project is to perform a personal identification based on the teeth and dental works in bitewing radiograph.

Identification process in this case involves two features, named the contours of teeth and dental works. Of the two values we should match the teeth sought antemortem (AM) and postmortem (PM) with Hausdorff Distance method that uses an affine transform for alignment process. Then the identity of AM image can be known after having the matchness value.

The system shows its power with the 98.81% of accuracy identification. So it can be used as a reference for the personal identification of teeth image.

Keywords: Bitewing radiograph, Dental works, Hausdorff Distance algorithm, Teeth biometric