

ABSTRACT

System of Age classification using dental panoramic radiograph images is intended to make it easier for doctors to identify victims of accidents within the field of forensic odontology. Dental panoramic radiograph is one of the dental x-rays extra oral technique that has been used in General by dentistry of teeth to get an overview that contains the dental formula of teeth contains the teeth of which seem to be growing and is still located in the gums. Therefore, it needs a computer-based tool to assist the process of classification of the aged person that's appropriate and consistent.

In this final project, the application was developed to identify the age from the image of dental panoramic radiograph that has gone through the scanning process to be an output of an estimated age. The method used to design the system that is Schour Massler which is diagram drawing teeth age estimates based on the classification process as well as the milk teeth and permanent teeth formation also the establishment of permanent crown, as well as K-Nearest Neighbor to the classification process.

This system capable of producing an estimated age from panoramic image of teeth with Euclidean Distance and Cityblock similarity measurement methods of 90% and the lowest error 10%. The average time of computing, the fastest value obtained with $k=5$ for 6,17 seconds with Euclidean Distance measuring similarity method.

Keyword : dental panoramic radiograph, Schour Massler, K-Nearest Neighbor