



**RESEARCH ARTICLE**

# A Role of Dental Radiograph in Human Forensic Identification

Dipali Rindhe<sup>1</sup>, Prof. A.N. Shaikh<sup>2</sup>

<sup>1,2</sup>Department of Electronics, SPWEC, Aurangabad, India

<sup>1</sup> dipalirindhe8943@gmail.com; <sup>2</sup> aamer\_be2005@yahoo.co.in

---

**Abstract**— *Dental based human identification is commonly used in forensic. Dentistry can contribute for the identification of human remains after any disasters or crimes in assistance to other medical specialties. The algorithm can be developed by comparing post mortem and ante mortem dental radiographs. This work aims to introduce radiographic images. In this paper, a contour and skeleton-based shape extraction as well as matching algorithm for dental radiograph is proposed. An active contour model with selective binary and Gaussian filtering regularised level set method is used for contour extraction. Shape matching is done by both contour and skeleton-based approaches. The experimental results are obtained from a database of dental images include radiographs only. This algorithm provides better matching decision about the person than the existing algorithms since it includes skeleton measures also. The performance measures obtained and the hit-rate indicates that the better matching is observed with radiographic than the photographic images.*

**Keywords**— *dental radiograph; shape extraction; Shape matching; skeleton measures; Gaussian filtering*

---

Full Text: <http://www.ijcsmc.com/docs/papers/December2013/V2I12201308.pdf>