World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

An Erudite Technique for Face Detection and Recognition Using Curvature Analysis

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Abstract : Face detection and recognition is an authoritative technology for image database management, video surveillance, and human computer interface (HCI). Face recognition is a rapidly nascent method, which has been extensively discarded in forensics such as felonious identification, tenable entree, and custodial security. This paper recommends an erudite technique using curvature analysis (CA) that has less false positives incidence, operative in different light environments and confiscates the artifacts that are introduced during image acquisition by ring correction in polar coordinate (RCP) method. This technique affronts mean and median filtering technique to remove the artifacts but it works in polar coordinate during image acquisition. Investigational fallouts for face detection and recognition confirms decent recitation even in diagonal orientation and stance variation.

Keywords: curvature analysis, ring correction in polar coordinate method, face detection, face recognition, human computer interaction

Conference Title: ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020