AN EFFICIENT HYBRID REAL TIME FACE RECOGNITION ALGORITHM IN JAVA ENVIRONMENT

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ABSTRACT

Image processing on mobile smart phones is a new and exciting field with many challenges due to limited hardware and connectivity problems. Android based mobile phones are now becoming the core of many applications. This paper develops a real time face recognition application model for smart phones. This introduced model uses a hybrid skin color-eigen face detection method and an interest point localization for feature matching. The paper is coded in JAVA programming language to fulfill Android smart phones. Results are shown and compared with existing open source techniques for verification. The aim is to maintain real time measures with high recognition rate. Applications range from security to people with disabilities adaptation.

Keywords: Face recognition, Real time, Eigenface, JAVA Code, Interest Point Detection, OpenCV.