

ABSTRACT

A FACE RECOGNITION APPLICATION BASED ON OPENCV AND ANDROID

by

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Face detection and recognition technologies have matured in labs, and recently more and more relevant applications and products are being developed. OpenCV makes it possible to develop these products openly and publicly. The widely used smart mobile devices and their integrated professional cameras make it much easier to deploy the face recognition technologies on a large-scale. This paper presents a practical face recognition product called “Whoo” which was developed using two popular technologies: Android and OpenCV. During the development of this product, a variety of existing algorithms for face detection and recognition were studied and analyzed. The product designs are modified incrementally, and thus, the product functionalities are expanding gradually. Despite some practical usages proposed in this paper, this software can also be used to collect more useful out-of-lab data, which has potentials for the optimization of face recognition technology itself.

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