Detection and Recognition of Partial Covered Faces.

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ABSTRACT

Technologies continuously evolve, but the main identification range of the current face recognition technology still limit at the part of face. However, different environment will cause different covered situation on the face, for example, wearing face masks prevent getting a cold and wearing sun glasses to avoid the ray of sun, so it will increase the percentage of mistake to detect and recognize the face under those kind of circumstance. In order to make the face recognition system can accurately detect and identify human faces, this study focuses on the covered situation on human faces to make a deep detection and identification. The part of shelter is to simulate different parts of shelter, so the first thing we do is establishing a subset of face model when we set up this system in order to make an easy comparison for images in the future. In the phase of face detection, using the images, which we input in the first step, to make skin color detection, Normalization, and analysis the distribution of skin color to judge the region of face and the covered range of images. Next, we adopt the characteristics of facial features to make the capture of characteristics. Finally, making a comparison with the information, which retrieved from last step, and face covered with a subset of the model to get this study results. This study designs a face recognition systems and the experimental result shows that the rate of recognition can reach more than eighty percent.

Keywords : face detection、face recognition、partial covered faces

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