

Face identification using image processing techniques

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Image processing technique is used to uniquely identify the objects from an image. In that way our research is based upon integrating an efficient image processing technique to uniquely identify face from digital image sources. Cross-correlation, template matching and neural network are integrated to form an efficient technique to identify faces. Firstly, the location of the face will be roughly sketched using cross-correlation from two templates one with brighter background and another one with darker background. Then Searching algorithm in the neural network will recheck and confirm already roughly plotted location. Not only it checks for the peak location, but also it checks all the area around already plotted location. If the output of the network is returned 0.5 for a search location, all the pixel locations will be marked around that pixel to be checked in the next search iteration. The proposed system will be able to identify different types of digital images. This system can be used for some automated statistical analytical purposes. This system will speed up the process of counting than the manual system of counting. The proposed system will be developed using math lab and open CV.

Keywords: Image processing, neural network, cross- correlation, template matching, math lab

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