An ellipse framework for precise iris edge detection

Abstract:

Iris segmentation is the principal task of Iris based biometric identification systems. Always the low contrast between pupil and iris always affects on accuracy of detecting boundary between them. In order to increasing using a difference function and a factor matrix. We also enhance the technique to detect the pupil and iris as ellipse instead of circle. Experiments show that the proposed technique can segment the iris region and pupil region precisely. Based on our result, 99.34% of eyes have been segmented accurately in 1.24s averagely.