

Iris Segmentation Based on EM Mixture of Gaussian Distribution

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We introduce a probabilistic approach to further improve the accuracy for iris segmentation. A robust probabilistic algorithm is proposed. Firstly, mixture Gaussian distribution family is presented By using EM algorithm. Secondly, the learning system is utilized until convergence to identify the three different regions of classes for each pixel. Finally, we approximate the bias field. In this paper, the MGD algorithm is proposed by utilizing the Gaussian distribution model for the mixture function, introducing a novel factor and integrating the bias field estimation model.

Keywords: *Casia Iris images database, Mixture of Distributions, Segmentation, EM algorithm*