Automated Localization of Palpebral Conjunctiva and Hemoglobin Determination Using Smart Phone Camera

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Abstract : The objective of this study was to evaluate the Degree of anemia by taking the picture of the palpebral conjunctiva using Smartphone Camera. We have first localized the region of interest from the image and then extracted certain features from that Region of interest and trained SVM classifier on those features and then, as a result, our system classifies the image in real-time on their level of hemoglobin. The proposed system has given an accuracy of 70%. We have trained our classifier on a locally gathered dataset of 30 patients.

Keywords : anemia, palpebral conjunctiva, SVM, smartphone
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