Abstract

A computer-aided retinal image analysis could provide an immediate detection and monitoring of abnormalities present in the retinal image. It allows to diagnose some retinal diseases prior to specialist inspection. This paper presents automatic system which can aid in the detection and monitoring of diabetic retinopathy (DR). The method proposed here is based on the preliminary automatic registration of retinal images, and the detection of changes in retinal images. This is done by comparing the registered retinal images. A novel algorithm is developed to achieve accurate registration. It ensures that the detected changes reflect only the real changes, and avoids any artifacts associated with the registration procedure itself. The special facts about retinal images are considered while performing image differencing. The present work in this paper is motivated by the need for automated, objective, quantitative approaches to detect the appearance of lesions and to detect longitudinal changes for monitoring DR. This system will considerably reduce the overall workload of ophthalmologists.
- Deepali A. Godse and Dr. Dattatraya S. Bormane, 2013. Automated Localization of


Index Terms

Computer Science
Artificial Intelligence

Keywords
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