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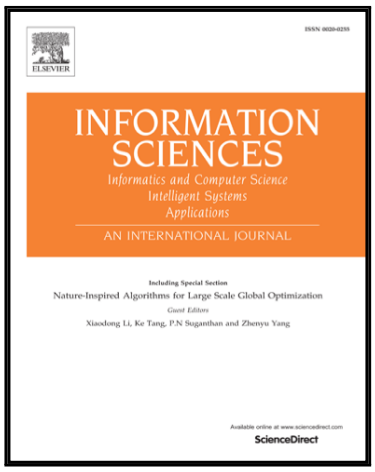

Diagnosis of Diabetic Retinopathy Based on Holistic Texture and Local Retinal Features

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PII: S0020-0255(18)30784-9
DOI: https://doi.org/10.1016/j.ins.2018.09.064
Reference: INS 13976

To appear in: *Information Sciences*

Received date: 25 September 2017
Revised date: 27 September 2018
Accepted date: 29 September 2018

Please cite this article as: Luis Bastos Frazao, Nipon Theera-Umpon, Sansanee Auephanwiriyakul, Diagnosis of Diabetic Retinopathy Based on Holistic Texture and Local Retinal Features, *Information Sciences* (2018), doi: https://doi.org/10.1016/j.ins.2018.09.064

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Highlights

- A new method to analyze eye fundus images for the automatic detection of diabetic retinopathy is proposed.
- Two types of features were extracted including the holistic texture features and the local retinal features.
- The performance of our system improved greatly when two local retinal features - microaneurysms and exudates - were incorporated into the analysis.
- The diagnostic performance of the algorithm is very promising and similar to previous automatic systems and human expert analysis on the same dataset.
- This framework has the potential to be used as an aiding tool for the diagnosis of diabetic retinopathy.

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