Accepted Manuscript

Deep Image Mining for Diabetic Retinopathy Screening

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PII: S1361-8415(17)30066-X
DOI: 10.1016/j.media.2017.04.012
Reference: MEDIMA 1254

To appear in: *Medical Image Analysis*

Received date: 16 October 2016
Revised date: 18 April 2017
Accepted date: 27 April 2017

Please cite this article as: Gwenolé Quellec, Katia Charrière, Yassine Boudi, Béatrice Cochener, Mathieu Lamard, Deep Image Mining for Diabetic Retinopathy Screening, *Medical Image Analysis* (2017), doi: 10.1016/j.media.2017.04.012

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Highlights

- A ConvNet is trained to detect images with referable diabetic retinopathy (DR)
- Training is supervised with image-level annotations only (referable DR or not)
- Thanks to a modified training procedure, pathological pixels can also be detected
- This solution outperforms DR screening systems in a public dataset of 90,000 images
- It also outperforms lesion detectors in the DiaretDB1 dataset, for all lesion types

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