

cases	doc_1		doc_2		decision	id
			authors	<ul style="list-style-type: none">Mrinal Haloi	DUPLICATES	78
	title	Improved Microaneurysm Detection using Deep Neural Networks	title	Improved Microaneurysm Detection using Deep Neural Networks		
	publication_date	2015-05-17 00:00:00	publication_date	2015-05-17 17:37:14+00:00		
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	journal	ArXiv	journal	None		
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	doi		doi			
	urls	<ul style="list-style-type: none">https://www.semanticscholar.org/paper/c270d9d9a2113600db3d517b930082655bd871e6	urls	<ul style="list-style-type: none">http://arxiv.org/pdf/1505.04424v2http://arxiv.org/abs/1505.04424v2http://arxiv.org/pdf/1505.04424v2		
	id	id3056191495709982013	id	id-3269050624682566494		
	abstract	In this work, we propose a novel microaneurysm (MA) detection for early diabetic retinopathy screening using color fundus images. Since MA usually the first lesions to appear as an indicator of diabetic retinopathy, accurate detection of MA is necessary for treatment. Each pixel of the image is classified as either MA or non-MA using a deep neural network with dropout training procedure using maxout activation function. No preprocessing step or manual feature extraction is required. Substantial improvements over standard MA detection method based on the pipeline of preprocessing, feature extraction, classification followed by post processing is achieved. The presented method is evaluated in publicly available Retinopathy Online Challenge (ROC) and Diaretdb1v2 database and achieved state-of-the-art accuracy.	abstract	In this work, we propose a novel microaneurysm (MA) detection for early diabetic retinopathy screening using color fundus images. Since MA usually the first lesions to appear as an indicator of diabetic retinopathy, accurate detection of MA is necessary for treatment. Each pixel of the image is classified as either MA or non-MA using a deep neural network with dropout training procedure using maxout activation function. No preprocessing step or manual feature extraction is required. Substantial improvements over standard MA detection method based on the pipeline of preprocessing, feature extraction, classification followed by post processing is achieved. The presented method is evaluated in publicly available Retinopathy Online Challenge (ROC) and Diaretdb1v2 database and achieved state-of-the-art accuracy.		
	versions		versions			