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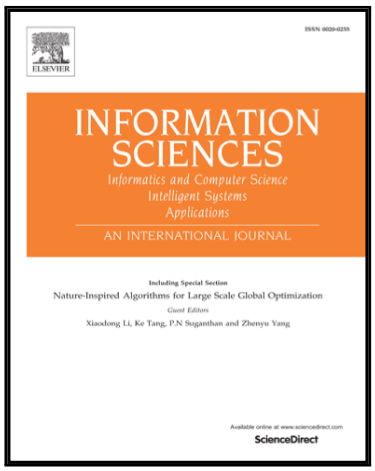


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# Deep Convolution Neural Network for Accurate Diagnosis of Glaucoma Using Digital Fundus Images

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## Abstract

Glaucoma progressively affects the optic nerve and may cause partial or complete vision loss. Raised intravascular pressure is the only factor which can be modified to prevent blindness from this condition. Accurate early detection and continuous screening may prevent the vision loss. Computer aided diagnosis (CAD) is a non-invasive technique which can detect the glaucoma in its early stage using digital fundus images. Developing such a system require diverse huge database in order to reach optimum performance. This paper proposes a novel CAD tool for the accurate detection of glaucoma using deep learning technique. An *eighteen* layer convolutional neural networks (CNN) is effectively trained in order to extract robust features from the digital

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