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(57) Abstract :

An aspect of the present disclosure relates to a device (202) for early prediction of diabetic retinopathy with application of deep learning. The device (202) includes an image capturing device (206), a memory (208) coupled to processor (204). The image capturing device(206) obtains a retinal fundus image from the user. The memory comprising executable instructions which upon execution by the processor (204) configures the device to obtain physiological parameters of the user in real-time from the image capturing device, retrieve the obtained retinal fundus image and the one or more obtained physiological parameters and compare the one or more extracted features with at least one pre-stored feature in a database to generate at least a prediction result indicative of detection of the presence, the progression or the treatment effect of the disease in the user.



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