

A Smart Mobile App for the Detection of Diabetic Retinopathy using Artificial Intelligence

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Abstract: *Diabetic Retinopathy (DR) is the main cause of blindness for people who have diabetes in the world. This condition occur when high blood sugar levels cause damages to the blood vessel in the retina. These blood vessels can swell and leak thereby cause damage to the normal vision. In this system we are developing an Artificial intelligence-Based smart mobile application for the diagnosis and treatment of diabetic retinopathy. Using Tensor flow mathematical library, the app analyses the eye fund us image through deep learning from Kaggle database. The app would be useful in promoting self evaluation and timely treatment of Diabetic Retinopathy (DR) by physicians. The app would achieve an accuracy about approximately 80-90% and have an overall good performance.*

Keywords: Diabetic-Retinopathy (DR), Deep-Learning, Artificial Intelligence(AI) , TensorFlow, Eye Fundus Images