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(57) Abstract:

The present disclosure provides a system and method for automated screening and diagnosis of retinal vascular diseases. The system and method includes one or more processing units configured to receive retinal images from one or more imaging sensors, extract and analyze the retinal images to generate a set of attributes, compare the set of attributes with reference values by a pre-trained programmable set of instructions, generate diagnostic reports corresponding to the retinal images and transmit the images and the reports to storage and display devices. The proposed method is configured to pinpoint specific locations, dimensions and other attributes of the affected regions of retina, and to grade the severity of the disease. The proposed system is configured to facilitate generation of easy-to-read reports within a pre-determined time from the screening of the retinal images, and further facilitates storage and retrieval of the reports and retinal images by authorized users.

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