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Eye Blood Vessel Segmentation Using Convolutional Neural Networks

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Eye blood vessel segmentation is an actual problem in biomedical image analysis, since analysis of vessels is crucial for diagnosis of various diseases, such as glaucoma, hypertension, diabetic retinopathy, macular degeneration, etc. Automatic segmentation can support in performing this task but still is challenging due advanced disease lesions, image quality and other causes. Various methods are developed for blood vessel segmentation, but methods based on convolutional neural networks have become most popular. The aim of this work is to develop a new method based on a convolutional neural network for eye blood segmentation.