

Dual-Encoder U-Net with Combined Features from Original and Patch Images for Improved Retinal Vessel Segmentation

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ABSTRACT

In this study, we propose a new U-Net structure for retinal blood vessel segmentation. The proposed model uses two encoders: one processes the original image, and the other processes image patches. These encoders work in parallel, and their features are combined to make better use of the information. This structure helps improve segmentation performance. Our experiments show that the proposed model performs better than the standard U-Net in key metrics like AUC, sensitivity, accuracy, and F1 score. This research can help in more accurately segmenting the complex features of retinal blood vessel images.

REFERENCES

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