

Technique Report of MICCAI 2020 Refuge2 Challenge

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Background

Code and trained models <https://github.com/JunMa11/MICCAI2020-Refuge2>

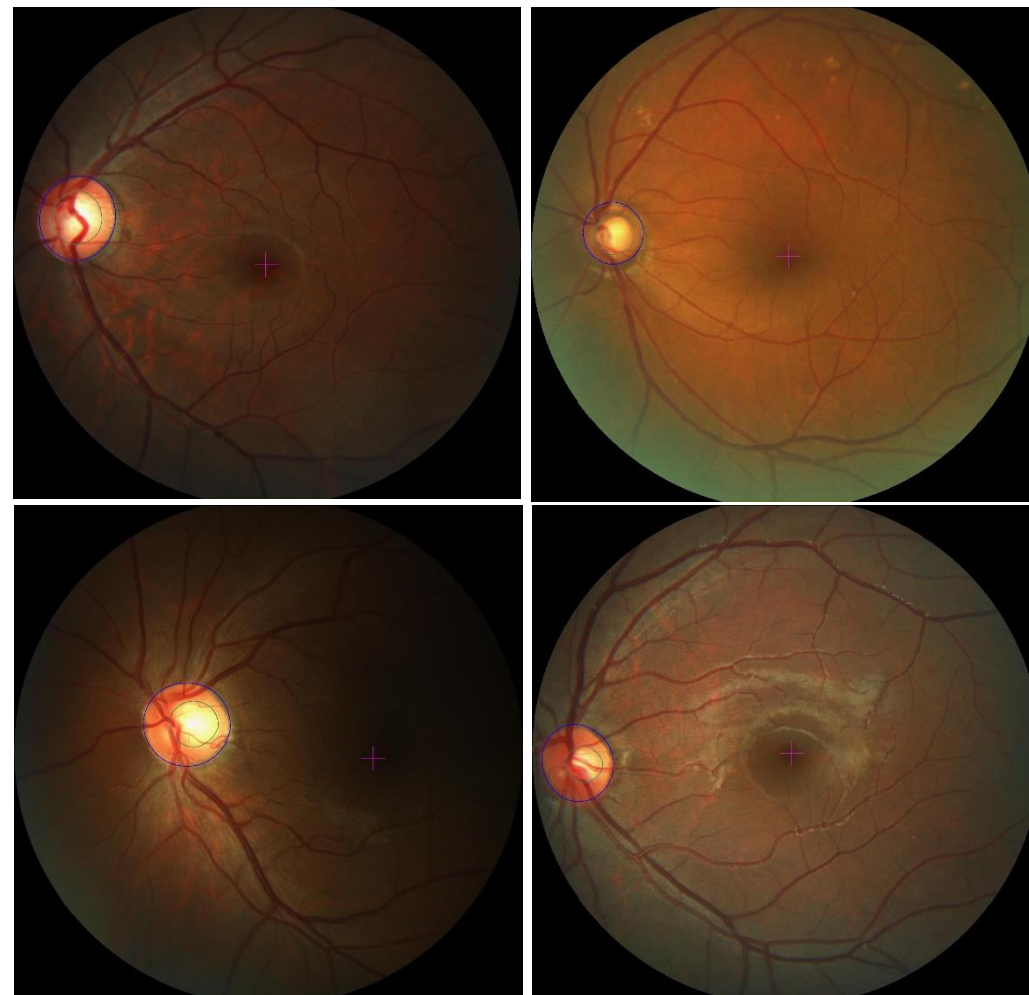


Fig 1. Examples of fundus images in training set.

Task 1. Glaucoma Classification

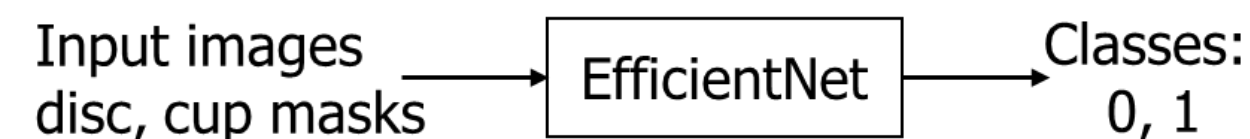
Network: Efficient-B6

Optimizer: Adam;

Patch size: 512*512*5; Batch size: 12

GPU: TITAN V100

AUC: 0.9286



Task 2. Optic Disc and Cup Segmentation

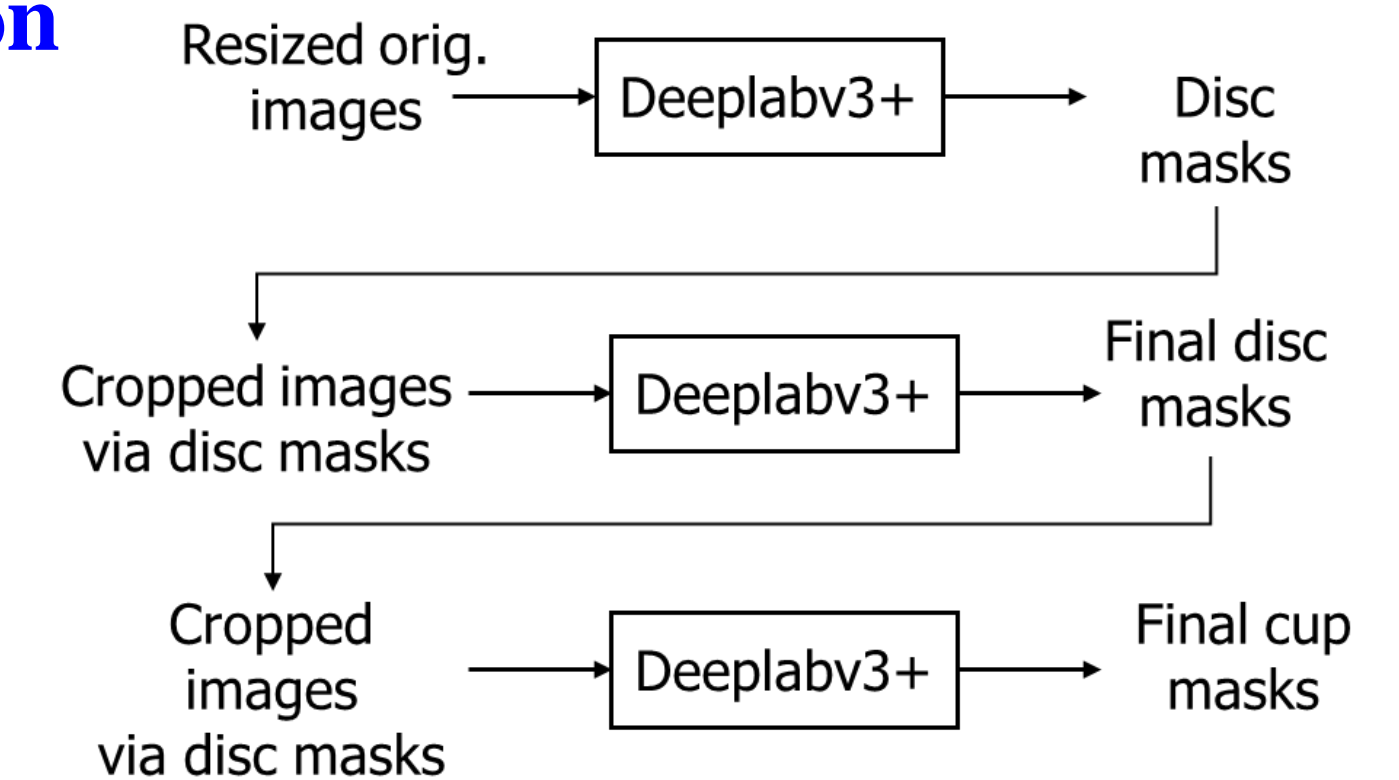
Network: U-Net

Optimizer: Adam;

Patch size: 512*512; Batch size: 28

GPU: TITAN V100

Mean Cup Dice: 0.8452; Mean Disc Dice: 0.9549



Task 3. Fovea Localization

Network: U-Net

Optimizer: SGD + Momentum;

Patch size: 400*400*3; Batch size: 21

GPU: TITAN V100

Euclidean Distance: 15.49

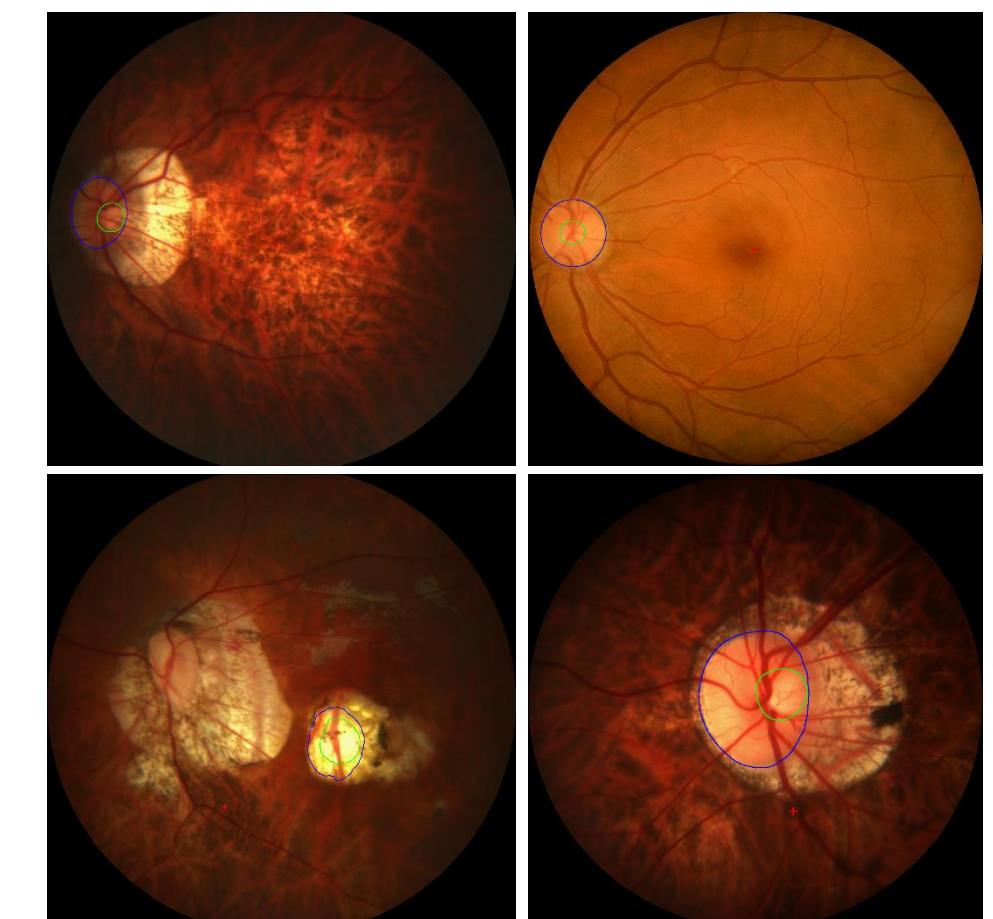


Fig 2. Segmentation and localization examples in testing set.