

Tables

Parameters	IoU	Dice
Without class weights, no augmentations	0.55	0.46 uninfected, 0.13 infected
class weights [0.1,1,4] (background, uninfected, infected), no augmentation, lr=0.0001	0.603	0.57 uninfected, 0.24 infected
class weights [0.1,1,5] (background, uninfected, infected), augmentation, lr=0.0001	0.643	0.91 uninfected, 0.42 infected
class weights [0.1,1,11] (background, uninfected, infected), augmentation, lr=0.0001	0.6872	0.92 uninfected, 0.41 infected

Table 1. Performance Metrics for UNet

Parameters	IoU	Accuracy
Without class weights, lr=0.0001, no augmentation	0.483	0.51 uninfected, 0.0614 infected
class weights [0.1,1,8] (background, uninfected, infected), no augmentation, lr=0.0001	0.875	0.984 uninfected, 0.64 infected
class weights [0.1,1,11] (background, uninfected, infected), augmentation, lr=0.0001	0.856	0.9857 uninfected, 0.685 infected
class weights [0.1,1,7] (background, uninfected, infected), augmentation, lr=0.0001	0.854	0.9672 uninfected, 0.7045 infected

Table 2. Performance Metrics for FASTER RCNN

Parameters	IoU	Accuracy
image size=640, lr=5e-5	0.6799	0.7512 uninfected, 0.5877 infected

Table 3. Performance Metrics for RT-DETR

Parameters	IoU	Accuracy
image size=440, box=5, cls=1, kobj=1	0.872	0.66 uninfected, 0.32 infected
image size=640, box=5, cls=1, kobj=1	0.92	0.68 uninfected, 0.34 infected
image size=640, box=7.5, cls=3, kobj=1	0.914	0.725 uninfected, 0.4059 infected

Table 4. Performance Metrics for YOLO