UNet Summary

Average Dice Coefficient: 0.912

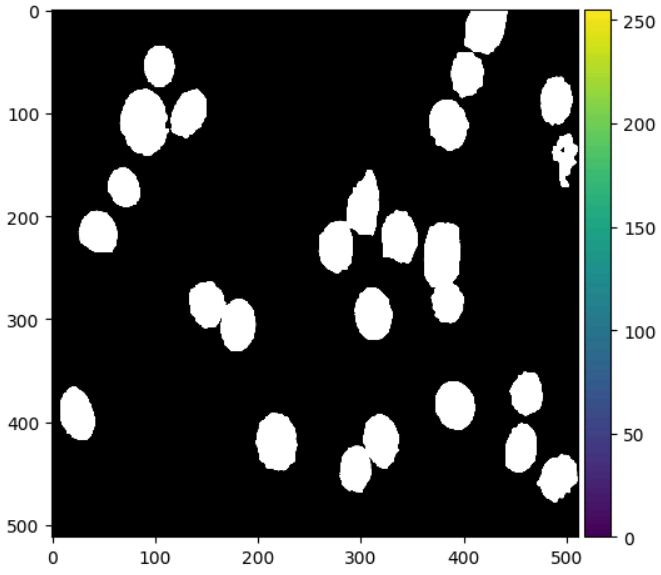
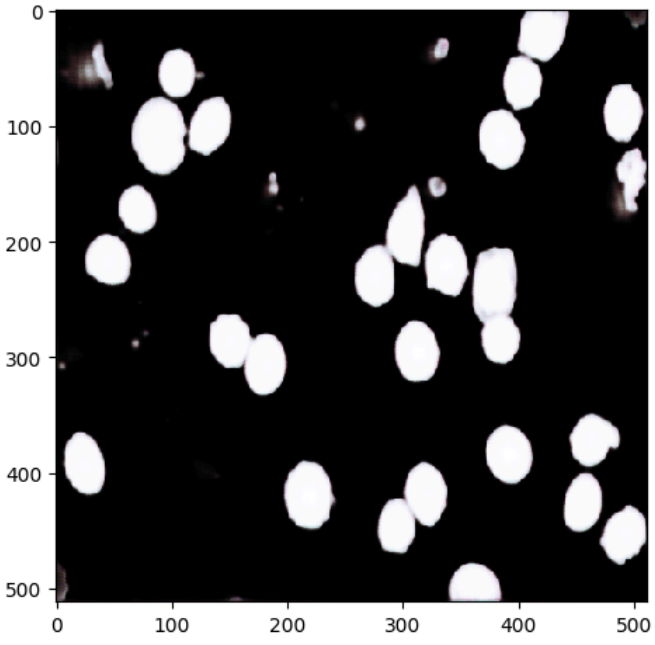
Average Jaccard Index: 0.839

```
avg_dice = 0
avg_jaccard = 0
for x in range(len(test_preds)):
  i = y_test[x]
  j = test_preds[x]
  avg_dice = avg_dice + tf.get_static_value(dice_coef2(i,j))
  avg_jaccard = avg_jaccard + tf.get_static_value(jaccard_index2(i,j))

print('Average Test Dice co-efficent: ', avg_dice/len(test_preds))
print('Average Test Jaccrad Index: ', avg_jaccard/len(test_preds))
```

```
Average Test Dice co-efficent:  0.9119188368320466
Average Test Jaccrad Index:  0.8388234049081802
```

Sample test vs prediction:

Ground Truth	Prediction
	

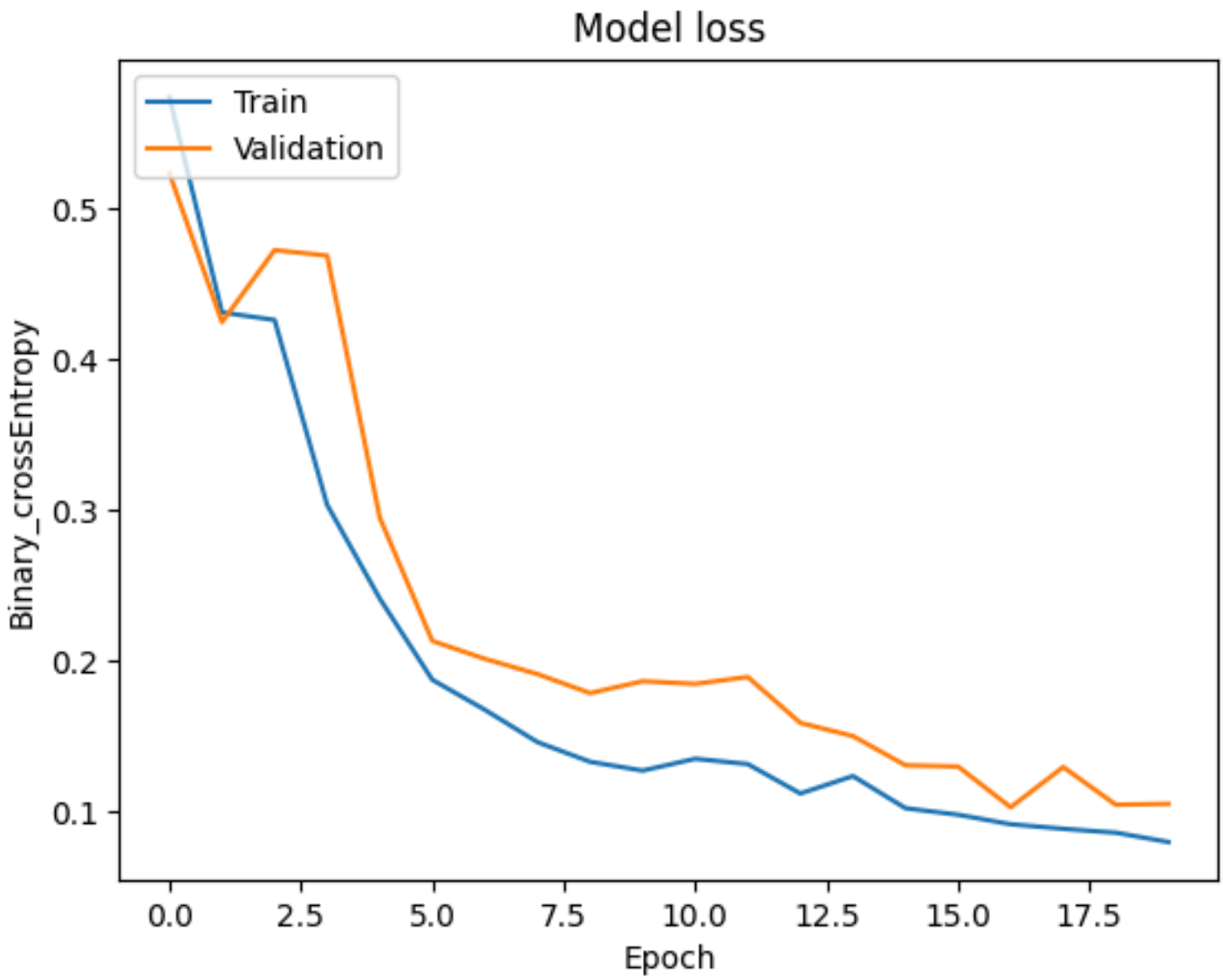
Model Evaluation:

```
[ ]  1 print('Lowest training loss: ', min(history.history['loss']))
     2 print('Lowest validation loss: ', min(history.history['val_loss']))
     3 print('Highest training dice coefficient: ', max(history.history['dice_coef']))
     4 print('Highest validation dice coefficient: ', max(history.history['val_dice_coef']))
     5 print('Highest training jaccrad index: ', max(history.history['jaccard_index']))
     6 print('Highest validation jaccard index: ', max(history.history['val_jaccard_index']))
```

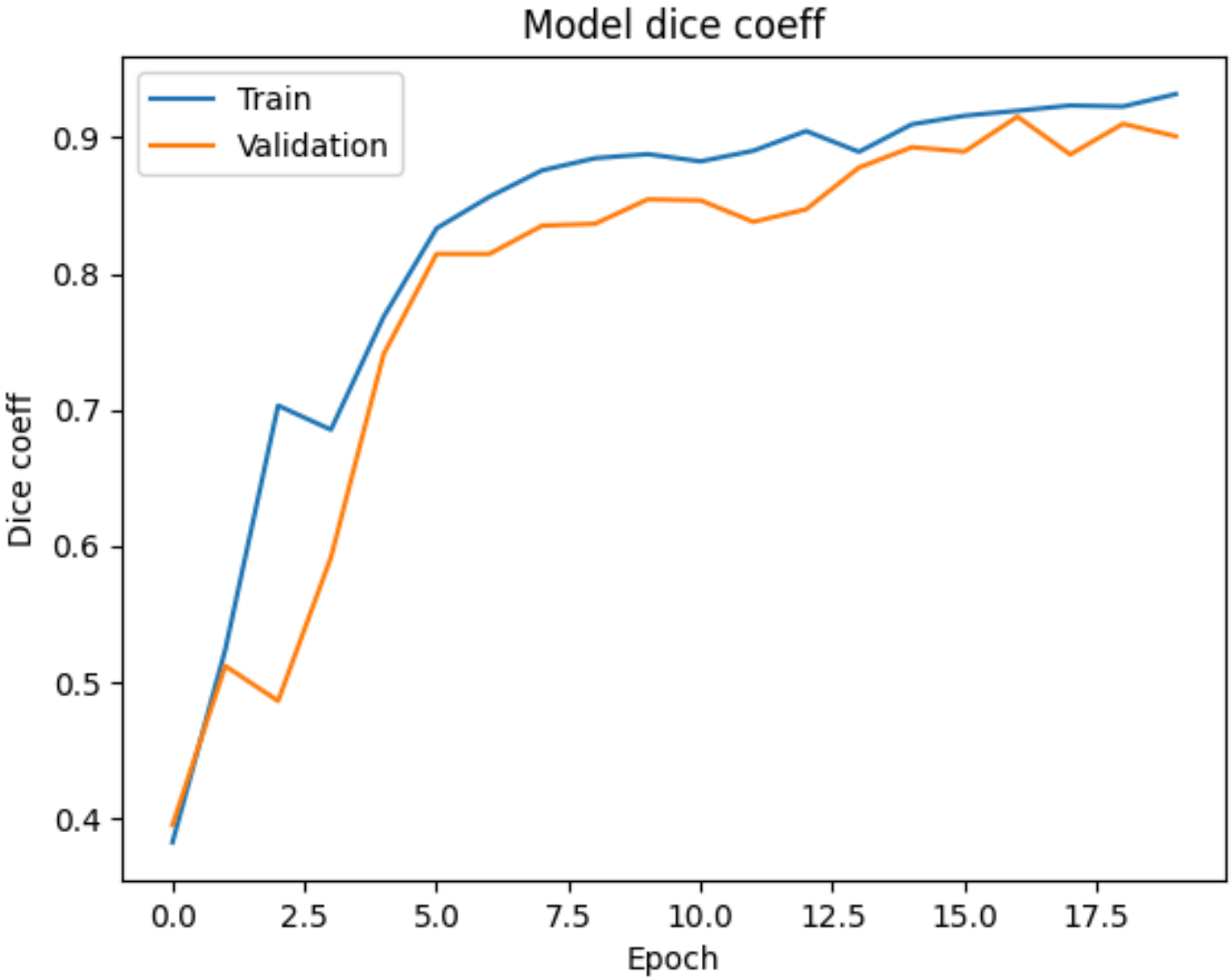
```
Lowest training loss:  0.0800824761390686
Lowest validation loss:  0.10313411056995392
Highest training dice coefficient:  0.9318262934684753
Highest validation dice coefficient:  0.9152576327323914
Highest training jaccrad index:  0.8729183077812195
Highest validation jaccard index:  0.8438817858695984
```

Model Eval graphs:

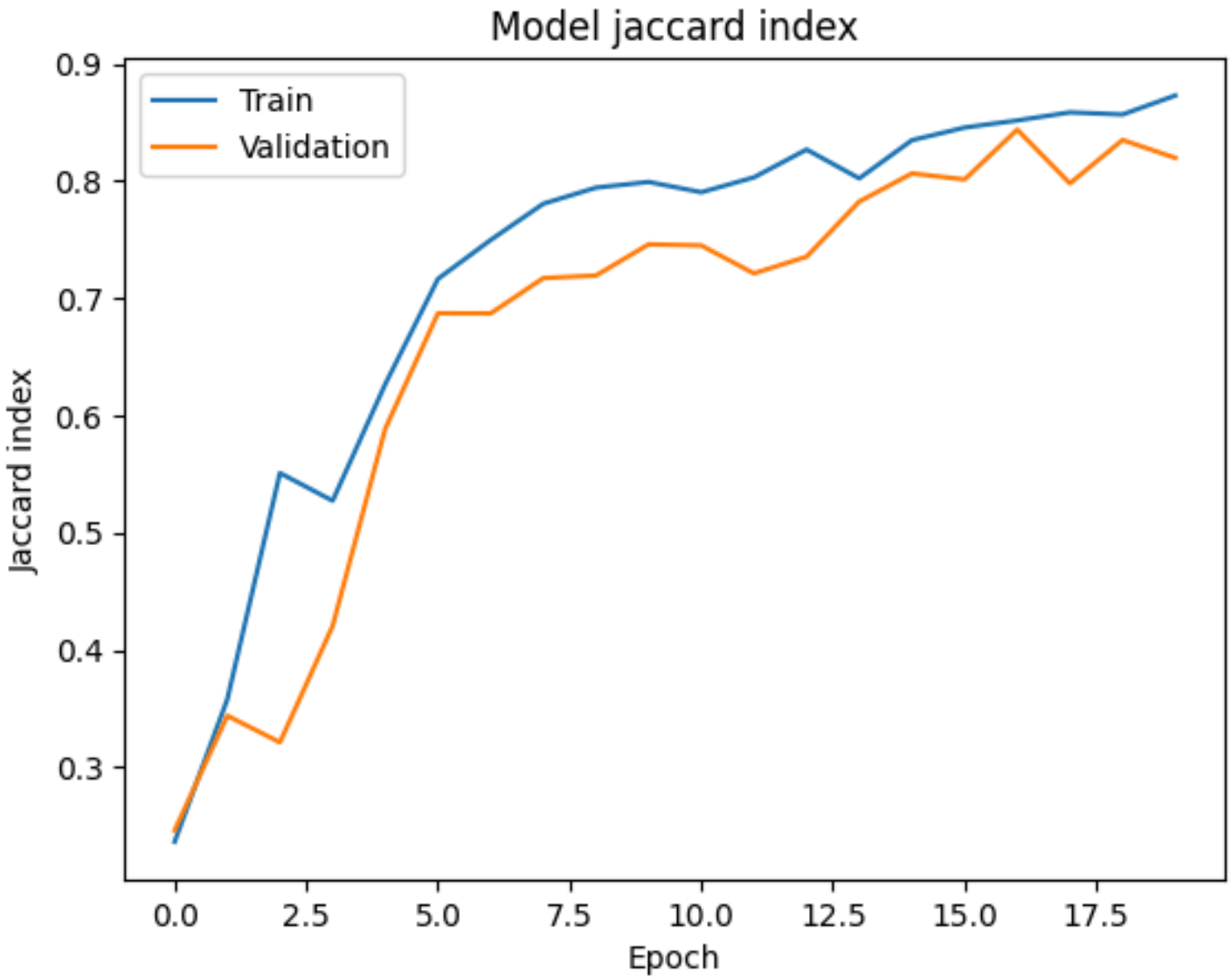
Loss vs Epoch



Dice Coefficient vs Epoch



Jaccard Index vs Epoch


Model jaccard index
Train
Validation
Jaccard index
Epoch
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5