

Evaluation of Mask Detection

Dataset

1000 images

- 500 Masked images
- 500 No mask images

Configuration

Split:	60%
	<ul style="list-style-type: none">- Training Data 60%- Testing Data 40%
Epochs:	500
Batch size:	16
Learning rate:	0.001

Evaluation

Confusion Matrix

Actual Class Predicted	Masked	No mask
Masked	197	1
No mask	3	199

$$\text{Accuracy} = (197 + 199) / (197 + 199 + 1 + 3) = 0.99$$

$$\text{Error} = 1 - 0.99 = 0.01$$

$$\text{Precision} = 197 / (197 + 1) = 0.99495$$

$$\text{Recall} = 197 / (197 + 3) = 0.985$$

$$\text{Specificity} = 199 / (199 + 1) = 0.995$$

$$\text{F1-Score} = (2 * 0.99495 * 0.985) / (0.99495 + 0.985) = 0.98995$$

Accuracy	Precision	Recall	Specificity	F1
0.99000	0.99495	0.98500	0.99500	0.98995