

Dataset

Training Set:

1063 Defective and 1497 Non Defective

Validation Set:

231 Defective and 231 Non Defective

Test Set:

174 Defective and 174 Non Defective

Results are reported on the test set

Saswat's model

	Accuracy	Defective Precision	Defective Recall	Non Defective Precision	Non Defective Recall
Fold1	79.8%	90%	67.2%	73.8%	92.5%
Fold2	79.5%	82.8%	74.71%	76.9%	84.4%
Fold3	79.02%	84.35%	71.26%	75.12%	86.7%

Experiment with cutmix

.Densenet201 initialized with imagenet pretrained weights

.Dense201 has 4 so called 'Dense blocks' followed by a classification dense layer. I froze the first two dense blocks and fine-tuned the last two dense blocks and the classification dense layer on my dataset.

.Epochs: 400

.Training batch size = 64

.Loss Function used: Negative Log Loss (Cross Entropy)

.Initial Learning rate was 0.1. Decreased by a factor of 0.1 after every 75 steps.

.Cutmix Threshold = 0.6

	Accuracy	Defective Precision	Defective Recall	Non Defective Precision	Non Defective Recall
Fold1	89.1%	95.3%	82.2%	84.3%	96%
Fold2	88.2%	95.2%	80.5%	83.1%	96%
Fold3	89.7%	94.2%	84.5%	85.9%	94.8%

