Image Segmentation

Progress Report

Bishal

Model Flow

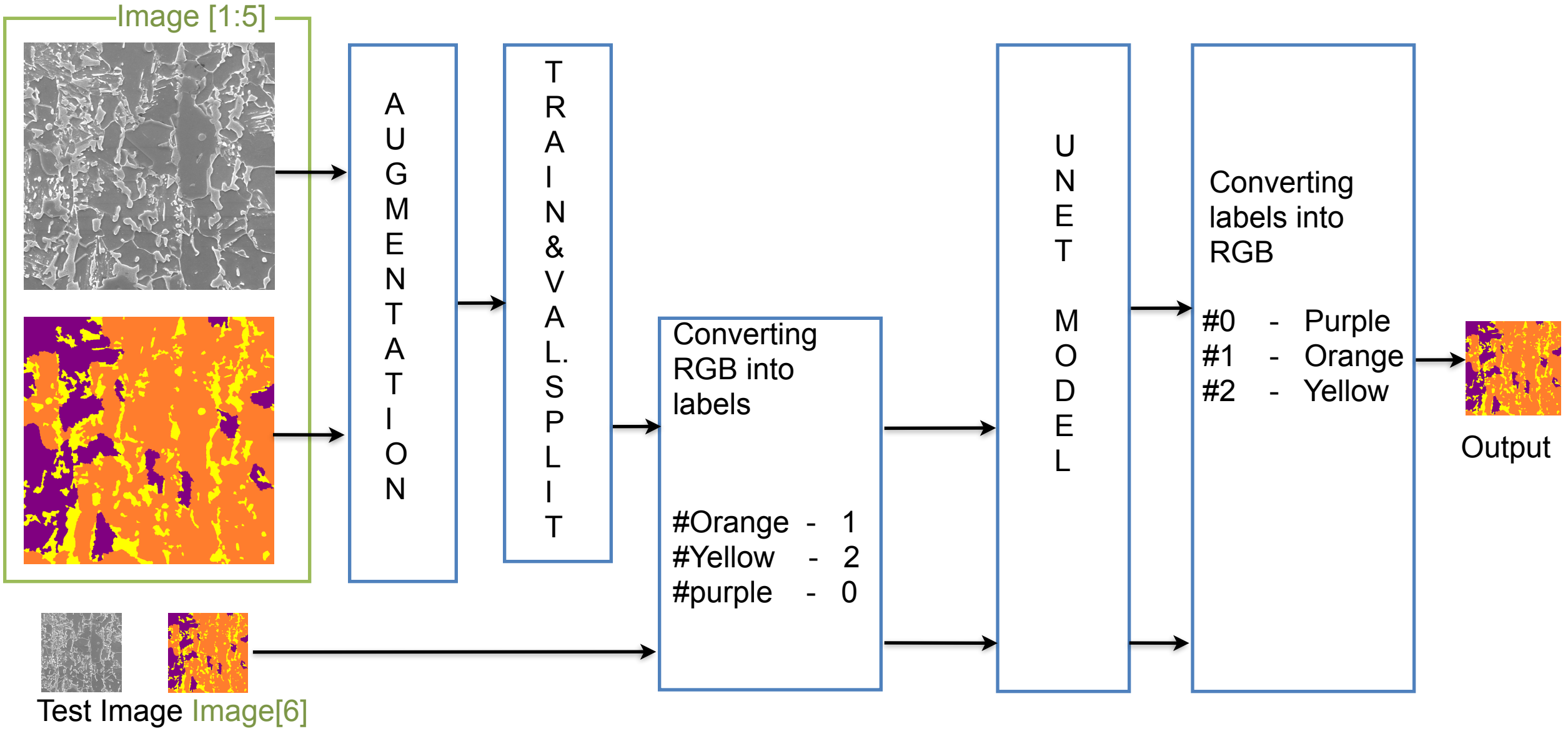
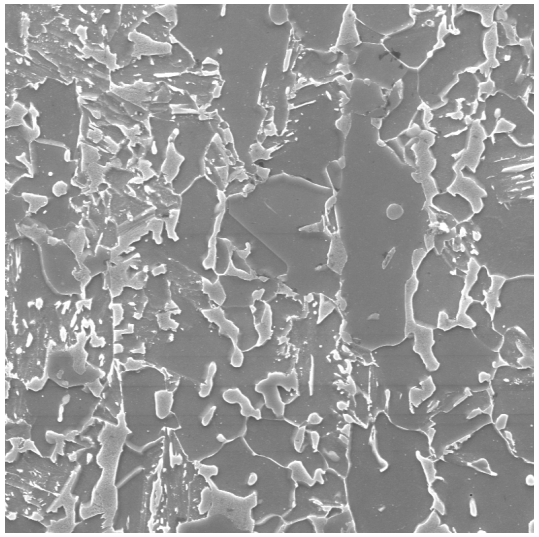
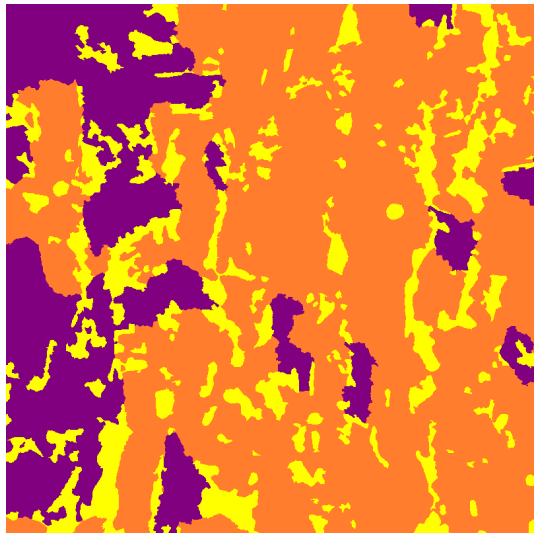


Image [1:5]
AUGMENTATION
TRAIN&VAL.SPLIT
Converting RGB into labels
#Orange - 1
#Yellow - 2
#purple - 0
UNET MODEL
Converting labels into RGB
#0 - Purple
#1 - Orange
#2 - Yellow
Output
Test Image Image[6]

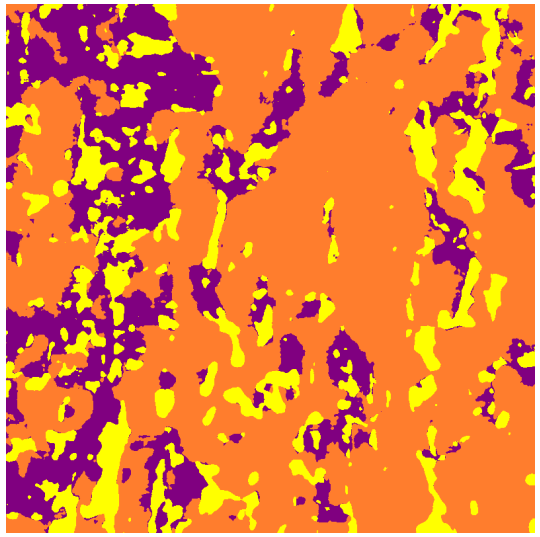
Experiment Output



Random Input Test image



Corresponding Label Image



Predicted Image

Validation mIOU - 0.3927
Validation Acc - 88.64
Test Accuracy - 79.10
Dice Coefficient - 0.7809
Training mIOU
Training Accuracy- 91.68

Inference with other types

	Avg (10)	Avg (8)	(1)	(1)	(1)
	x3000	**x5000**	**typeA**	**typeB**	**typeC**
Current Model	89.18	80.84	76.05	47.61	67.89
Prev. Model	75.81	79.29	74.83	55.71	67.52

Accuracy Percentage

Epochs - 200
Train Image Size - 800x800
Test Image Size - 1500x1500

Inference with other types

	Avg (10)	Avg (8)	(1)	(1)	(1)
	x3000	**x5000**	**typeA**	**typeB**	**typeC**
Current Model	0.8838	0.7984	0.7505	0.4671	0.6593
Prev. Model	0.7514	0.7845	0.7324	0.5944	0.6252

DICE coefficient

Epochs - 200
Train Image Size - 800x800
Test Image Size - 1500x1500

Thank You