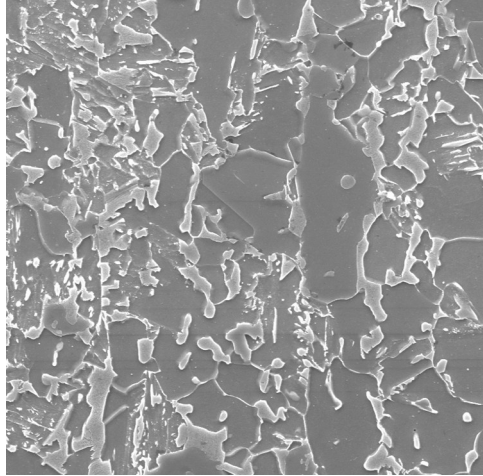
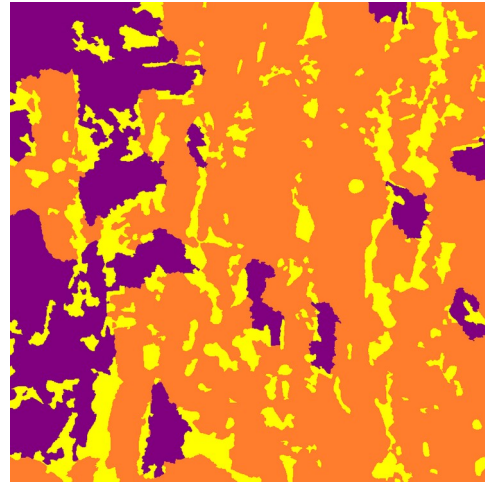


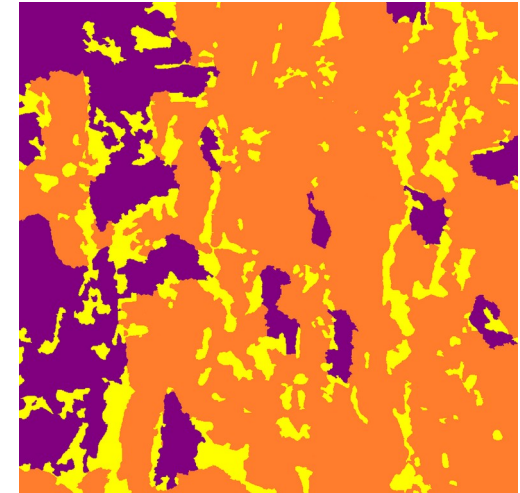
Model Output [Model 7]



Input Test Image



Input Label Image



Output Test Image

Validation mIOU → 0.1734

Validation Acc → 56.87

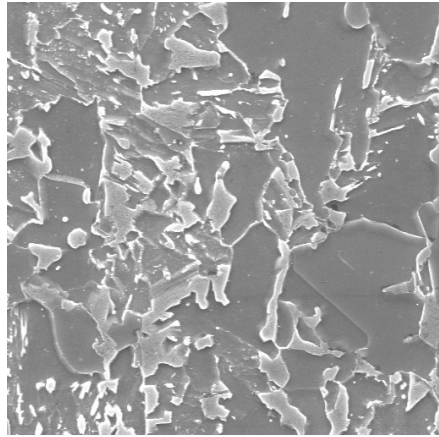
Test Accuracy → 82.99

Dice Coefficient → 0.81350676 (avg of 48 test images)

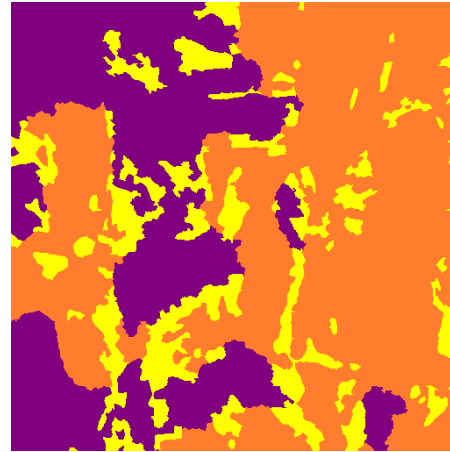
Traning mIoU → -

Training Acc → 91.68

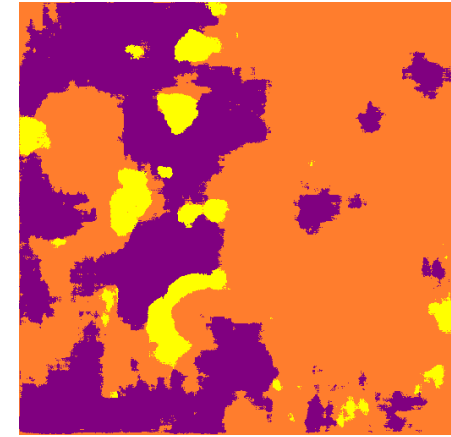
Model Output [Model 8][after 200 iter]



Input Test Image



Input Label Image



Output Test Image

Validation mIOU \rightarrow 0.3728

Validation Acc \rightarrow 70.32

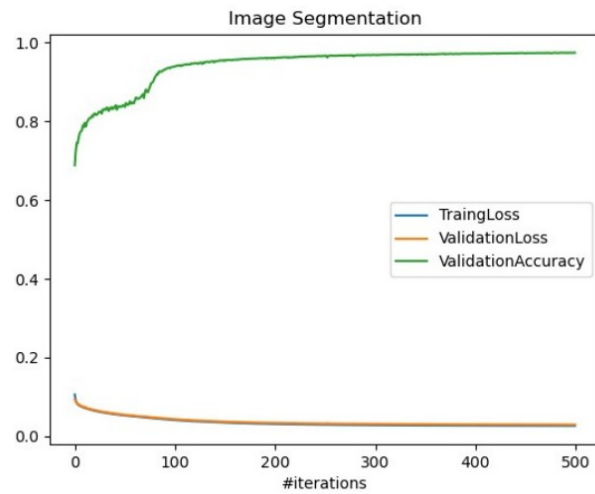
Test Accuracy \rightarrow 61.79

Dice Coefficient \rightarrow 0.602

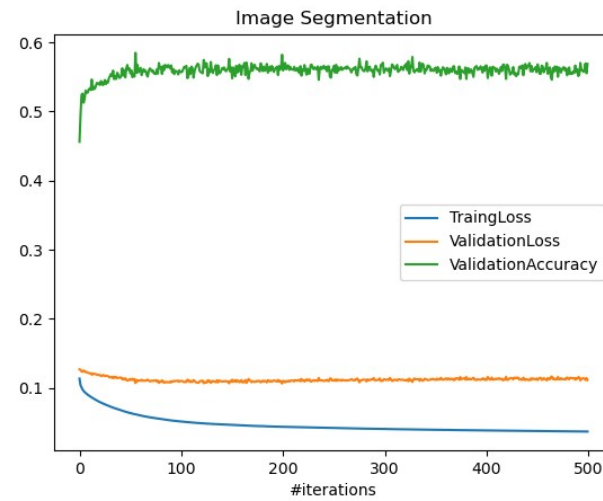
Traning mIoU \rightarrow 0.41621

Training Acc \rightarrow 78.54

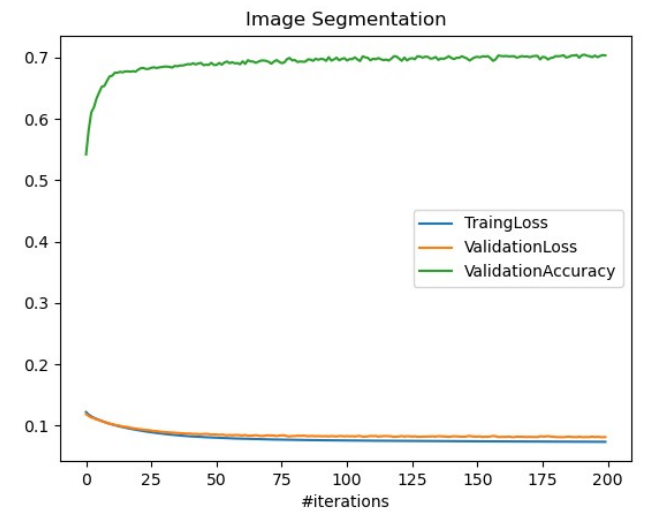
Model Performance



Model 6



Model 7



Model 8

Testing on other type of steel data

Accuracy % on test set

	x3000	x5000	typeA	typeB	typeC
Model 6	58.85	28.82	46.29	73.61	34.48
Model 7	75.81	83.29	74.83	55.9	69.94
Model 8	70.01	78.75	47.71	7.46	40.48

Model 6, 7, 8

	Model 6	Model 7	Model 8
Augmentation	Zoom Sliding Window	<ul style="list-style-type: none"> • Magnification • sliding window • random Intensity • random gamma • rotation up to 10 degrees 	<ul style="list-style-type: none"> • Magnification • sliding window • random Intensity • random gamma • random noise • horizontal and vertical flip • rotation up to 20 degrees
Training Image Size	(512x512)	(512x512)	(800, 800)
(Train, Validation, Test)	(5780, 426, 48)	(11724, 213, 48)	(10000, 3000, 920)
Accuracy (#iterations)	98.91 (500)	91.68 (500)	78.54 (200)