Remote Sensing L2W3

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1 Model Architecture

Pytorchlightning module was used to track and log model, training. A couple of architectures with different depth were tried but the one with best validation loss was selected as the final model.

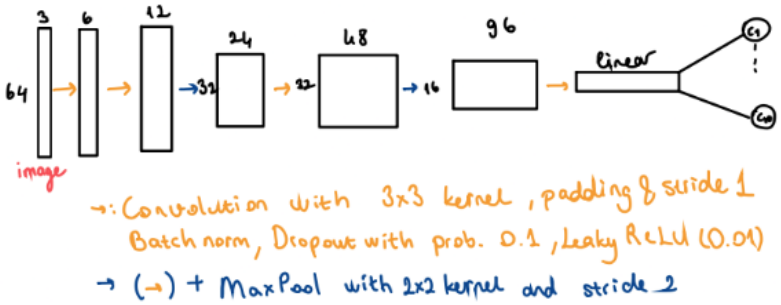

Figure 1: Final Model Architecture

2 Training Details

The model was trained with Adam optimizer with weight decay for 19 epochs in Google Colab with a GPU. Changes in the learning rate can be seen in Figure 5.

For grading purposes `grading` boolean can be set to `True` under Training section in the notebook, so that it won't require wandb login.

3 Results

Results of the training can be seen below. Purple dashed line represents training metric while the blue solid line represents that of validation. Since wandb logs these values stepwise, smoothing was applied to produce final charts.

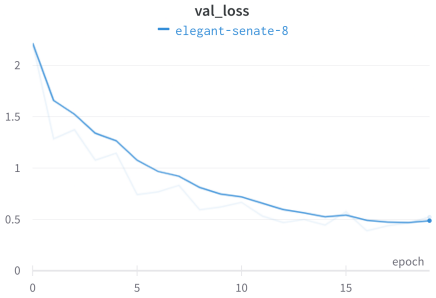

Figure 2: Validation Loss

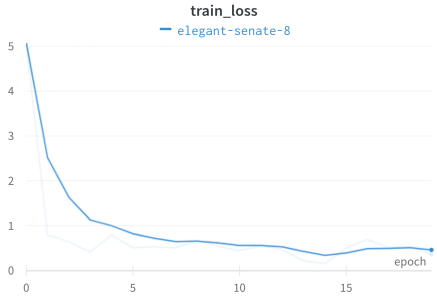

Figure 3: Training Loss

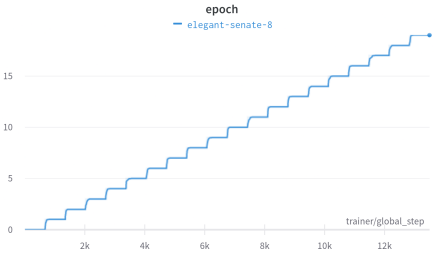

Figure 4: Epochs vs. Step

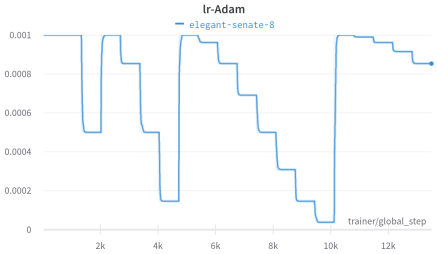

Figure 5: Learning Rate

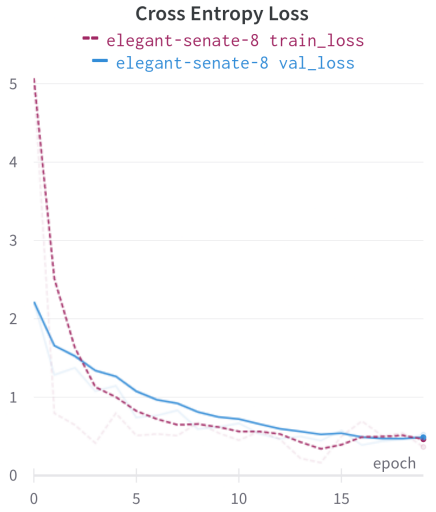

Figure 6: Training and Validation Loss

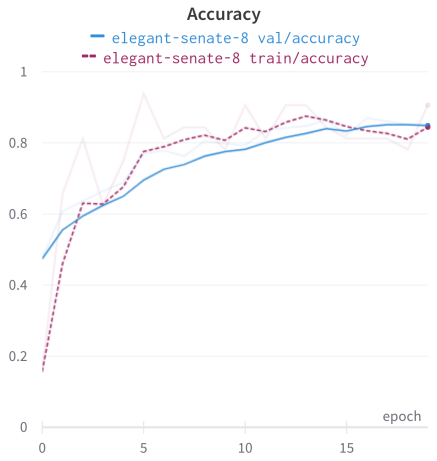

Figure 7: Training and Validation Accuracy