

GW Burst Progress Documentation

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1 Adding Noise

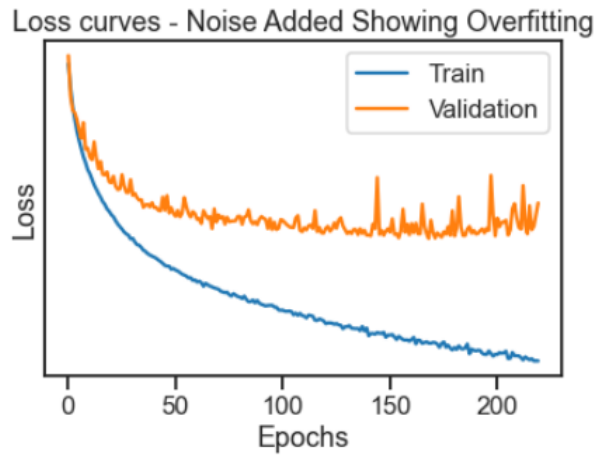
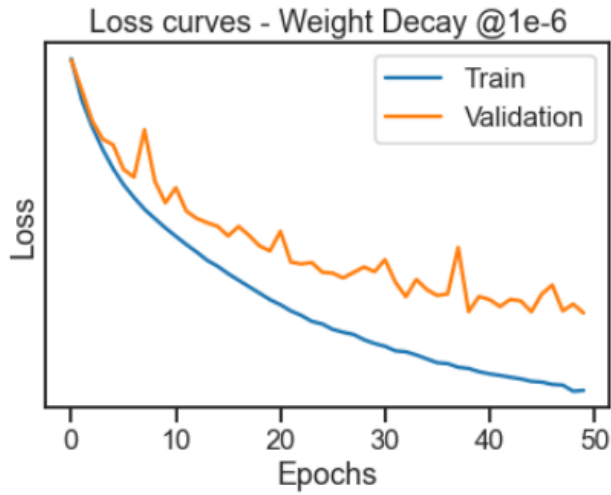


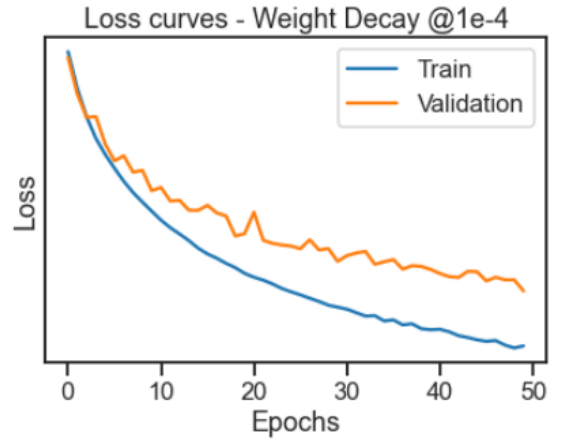
Figure 1: Loss curves comparing training and validation set demonstrating overfitting in the model

Steps relating to the model were taken to try and optimise the model, first attempt was with regularisation, in particular altering the weight decay parameter in the adam optimiser from 1×10^{-6} to $\times 10^{-4}$.

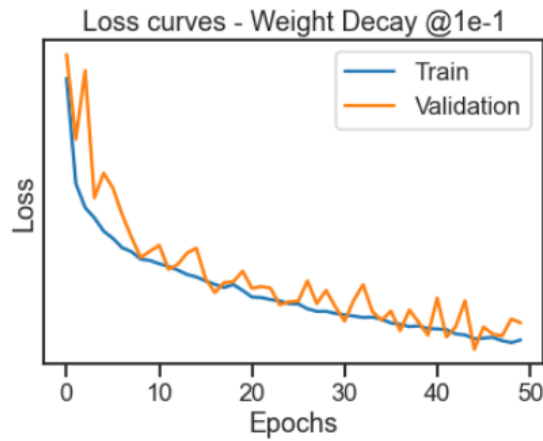
I ran the first 50 epochs to compare to the initial overfitted curves



(a) Loss curves after increasing the weight decay to 1×10^{-6}



(b) Loss curves after increasing the weight decay to 1×10^{-4}



(c) Loss curves after increasing the weight decay to 1×10^{-1}

Figure 2: Comparing Loss Curves when altering weight decay

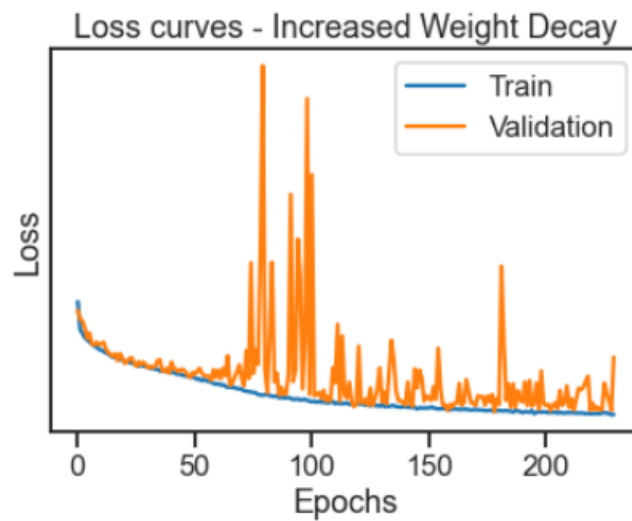


Figure 3: Running for 225 epochs with the weight decay increased to 1×10^{-1}

Next approach is to decrease the learning rate from 1×10^{-3} to 1×10^{-4}