# Situation

## Bug Located

As of last week I had a particularly problematic bug in which “identical” sequence decimating networks constructed in two different ways behaved differently during training.

Case 1:

* Train stack of layers, saving each one in array oaLayers.
* Pickle oaLayers
* Load oaLayers
* Create oSdn1 = SequenceDecimatingNetwork(oaLayers)
* Train oSdn1

Case 2:

* Train stack of layers, saving each one in array oaLayers.
* Create oSdn2 = SequenceDecimatingNetwork(oaLayers)
* Pickle oSdn2
* Load oSdn2
* Train oSdn2

Based on that it is not safe to use pickle and unpickle the sequence decimating object.

It turns out that

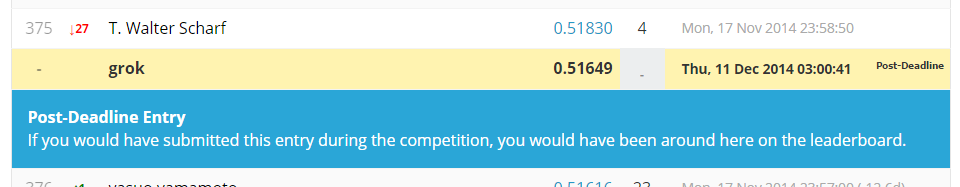
## Back Propagation

Following initial training, append an additional Nx1 layer with random weights.

During supervised training, freeze all but the output layer weights during the first two training batches.

Write out train.csv in addition to test.csv.

This is the score with “Some fixes…”



Posted score of 0.51!

