**Minutes**

10/03/23:

* Discussed design section in dissertation:
  + Talked about things I wasn’t sure how to define (e.g., use of ‘input channels’ as a term).
  + Discussed drawing tools for creating DNN figures.
  + Discussed batching/padding:
    - I haven’t padded any sequences yet (batch size 1).
    - Could look at RNN pad sequences: <https://pytorch.org/docs/stable/generated/torch.nn.utils.rnn.pad_sequence.html>.
* Important to note: some things cannot be proven theoretically, that’s why it’s important to experiment. Optimisers, network architectures, architecture complexity and size.
* Discussed loss function:
  + I weight my disordered labels up by the weight multiplier. However, finding a normalised inverse multiplier could also be used.
  + A weight could have a knock-on effect to backpropagation and the learning process.
* Discussed evaluation metrics:
  + I noticed my MCC (Matthews Correlation Coefficient) is different depending on if I take the average of each sequence or use all the labels together to calculate the MCC.
  + This is expected, as it is not a statistic like the mean which can use smaller groups and sum, then average them, or one big group and find the same mean.
  + Continue to do it as an average of each sequence. I will also check which way other prediction methods calculate it.

Goals for this week:

* Finish tidying up design section.
* Lock final models and run my notebooks so I can get results for my evaluation.
* Write up implementation section.