**ECS7013P: Deep Learning for Audio and Music**

**Lab 3 – CNN**

Using PyTorch, implement and train a simple CNN as follows:

* Data: warblrb2k (note that this dataset is for a binary classification problem)
* Input features: spectrograms – feel free to reuse spectrogram code, e.g. from previous labs.
* Network architecture: the given scaffolding code is supposed to implement the following CNN:
  + 5×5 conv → 8×4 maxpool →
  + 5×5 conv → 8×4 maxpool →
  + 3×3 conv → 2×1 maxpool →

followed by two dense layers at the end.

You can follow the given notebook for most of this. You will need to complete the network and write your own code to iterate through our dataset and pass spectrograms to the network.