



**Figure 1. (A) Graph neural network used in our study for seizure detection.** The model consists of several Diffusion Convolutional Recurrent layers (Li et al. 2018), followed by a prediction layer with ReLU activation, fully connected layer, max-pooling over nodes and Sigmoid activation. Finally, we obtain the predictions of seizure or no seizure based on the output probabilities from the prediction layer. **(B) Meta-learning framework which incorporates different ages and downsampled signals into the model.** The model takes as inputs the original EEG signals together with downsampled signals (e.g. downsampled by 2 and 4). Each of the base models consists of several Diffusion Convolutional Recurrent layers. The downsample layer aims to learn to choose between the output representations from the base models for the downsampled inputs.