CNN 1 layer

Layer (type) Output Shape Param #

conv1d_1 (Conv1D) (None, 1024, 64) 256

max_pooling1d_1 (MaxPooling1 (None, 512, 64) 0

flatten_1 (Flatten) (None, 32768) 0

dense_1 (Dense) (None, 128) 4194432

dropout_1 (Dropout) (None, 128) 0

dense_2 (Dense) (None, 25) 3225

Total params: 4,197,913

Trainable params: 4,197,913

Non-trainable params: 0

CNN 2 layer

Layer (type) Output Shape Param #

conv1d_1 (Conv1D) (None, 1024, 64) 256

max_pooling1d_1 (MaxPooling1 (None, 512, 64)

conv1d_2 (Conv1D)	(None, 512, 12	8) 24704			
max_pooling1d_2 (MaxPooling1 (None, 256, 128) 0					
flatten_1 (Flatten)	(None, 32768)	0			
dense_1 (Dense)	(None, 128)	4194432			
dropout_1 (Dropout)	(None, 128)	0			
dense_2 (Dense)	(None, 25)	3225			

Total params: 4,222,617

Trainable params: 4,222,617

Non-trainable params: 0

CNN 1 layer – LSTM

Layer (type)	Output Shape	Param #			
conv1d_1 (Conv1D) (None, 1024, 64) 256					
max_pooling1d_1 (MaxPooling1 (None, 512, 64) 0					
lstm_1 (LSTM)	(None, 70)	37800			

dropout_1 (Dropout) (None, 70) 0	
dense_1 (Dense) (None, 25) 1775	
Total params: 39,831	
Trainable params: 39,831 Non-trainable params: 0	
CNN 2 layer – LSTM	
Layer (type) Output Shape Param #	
conv1d_1 (Conv1D) (None, 1024, 64) 256	
max_pooling1d_1 (MaxPooling1 (None, 512, 64) 0	
conv1d_2 (Conv1D) (None, 512, 128) 24704	
max_pooling1d_2 (MaxPooling1 (None, 256, 128) 0	
Istm_1 (LSTM) (None, 70) 55720	
dropout_1 (Dropout) (None, 70) 0	
dense_1 (Dense) (None, 25) 1775	

Total params: 82,455

Trainable params: 82,455

Non-trainable params: 0
