Evaluating Different Models for HW 4

PART 2

Part	Type	Epochs	Num. of Words in Tokenizer	Text Sequence Max Length	output_dim	Accuracy	Loss	Precision	Recall
2	Basic Sequential	1	5	5	128	59.058%	67.246%		
2	Basic Sequential	5	5	5	128	59.042%	66.840%		
2	Basic Sequential	10	5	5	128	58.792%	66.820%		
2	Basic Sequential	1	50	20	128	80.017%	43.463%		
2	Basic Sequential	5	50	20	128	82.225%	39.628%		
2	Basic Sequential	10	50	20	128	83.533%	36.650%		
2	Basic Sequential	1	200	35	128	90.283%	24.218%		
2	Basic Sequential	5	200	35	128	92.308%	19.547%		
2	Basic Sequential	10	200	35	128	93.225%	17.566%		
2	Basic Sequential	1	400	50	128	93.625%	16.541%		
2	Basic Sequential	5	400	50	128	95.633%	11.731%		
2	Basic Sequential	10	400	50	128	96.058%	10.705%		
2	Basic Sequential	1	800	75	128	96.283%	9.881%		
2	Basic Sequential	5	800	75	128	97.808%	6.299%		
2	Basic Sequential	10	800	75	128	98.075%	5.574%		
2	Basic Sequential	1	800	100	128	97.008%	8.267%	Precision	Recall
2	Basic Sequential	5	800	100	128	98.183%	5.117%	98.720%	96.540%
2	Basic Sequential	10	800	100	128	98.450%	4.787%		
2	Basic Sequential	1	10000	100	128	98.575%	3.838%		
2	Basic Sequential	5	10000	100	128	99.117%	3.502%		
2	Basic Sequential	10	10000	100	128	99.142%	4.238%		

Starting with the best model from part 2:

Part	Type	Epochs	Num. of Words in Tokenizer	Text Sequence Max Length	output_dim	Accuracy	Loss	Precision	Recall
2	Basic Sequential	5	800	100	128	98.183%	5.117%	98.720%	96.540%
3	RNN + Dense Layer	5	800	100	128	70.717%	56.516%		
3	RNN	5	800	100	128	84.775%	33.474%		
3	CNN	5	800	100	128	98.908%	4.312%	Precision	Recall
3	CNN	2	800	100	128	98.925%	3.086%	98.900%	98.120%
3	LSTM	5	800	100	128	98.483%	4.911%		

PART 4 (see next page for PART 4.2)

Starting with the best model from part 3:

Part	Type	Epochs	Num. of Words in Tokenizer	Text Sequence Max Length	output_dim	Accuracy	Loss	Precision	Recall
3	CNN	2	800	100	128	98.925%	3.086%	98.900%	98.120%
4	CNN	2	600	100	128	98.700%	3.770%		
4	CNN	2	400	100	128	97.483%	6.798%		
4	CNN	2	200	100	128	98.092%	5.614%	98.170%	97.770%
4	CNN	2	100	100	128	97.583%	7.064%		
4	CNN	2	50	100	128	96.442%	9.792%		
4	CNN	2	25	100	128	93.992%	15.565%		
4	CNN	2	5	100	128	77.692%	46.499%		

PART 4.2: output_dim

Part	Type	Epochs	Num. of Words in Tokenizer	Text Sequence Max Length	output_dim	Accuracy	Loss	Precision	Recall
4.1	CNN	2	200	100	128	98.092%	5.614%	98.170%	97.770%
4.2	CNN	2	200	100	256	97.150%	7.895%	98.160%	97.730%
4.2	CNN	2	200	100	64	98.083%	5.464%	97.530%	97.850%
4.2	CNN	2	200	100	32	97.483%	7.381%	99.010%	95.270%
4.2	CNN	2	200	100	16	97.175%	7.818%	97.060%	97.080%
4.2	CNN	2	200	100	8	96.342%	9.583%	96.570%	96.590%
4.2	CNN	2	200	100	4	95.300%	12.198%	96.280%	94.730%
4.2	CNN	2	200	100	2	94.225%	15.156%	88.080%	97.330%