

TABLE 1: Performance of different neural network

Ten-fold	LSTM			Full Connection			CNN		
	Precision	Recall	F1	Precision	Recall	F1	Precision	Recall	F1
1#	91.08%	50.12%	0.65	15.63%	10.72%	0.13	67.64%	46.42%	0.55
2#	86.27%	45.58%	0.60	19.50%	13.11%	0.16	59.94%	40.30%	0.48
3#	93.59%	49.74%	0.65	15.76%	10.75%	0.13	67.75%	46.22%	0.55
4#	90.75%	53.94%	0.68	10.75%	7.61%	0.09	73.86%	52.26%	0.61
5#	88.78%	51.51%	0.65	13.45%	9.61%	0.11	59.29%	42.35%	0.49
6#	88.00%	44.16%	0.59	20.88%	14.90%	0.18	60.52%	41.19%	0.49
7#	91.77%	48.83%	0.64	15.50%	10.73%	0.13	64.24%	44.48%	0.53
8#	91.87%	48.45%	0.63	16.72%	11.39%	0.14	67.62%	46.09%	0.55
9#	92.89%	47.90%	0.63	19.32%	13.29%	0.16	69.54%	47.85%	0.57
10#	93.87%	46.53%	0.62	19.46%	12.86%	0.15	68.83%	45.48%	0.55
Average	90.90%	48.67%	0.64	16.80%	11.50%	0.14	65.92%	45.26%	0.54