

Hiparameters	VALUES
HIDDEN	150
DEPTH	2
DROPOUT	0.2
LR	0.0001
MIN_FREQ	1
BIDIRECTIONAL	FALSE
EPOCHS	10

RNN					
ATTENTION = TRUE					
ACCURACY	PRECISSION	RECALL	F	TEST ERROR	
0.788	0.842	0.699	0.764	0.484	
0.774	0.721	0.881	0.793	0.472	
0.774	0.849	0.657	0.740	0.503	
0.782	0.752	0.829	0.789	0.505	
0.803	0.779	0.834	0.806	0.463	
0.784	0.789	0.780	0.778	0.485	AVARAGE
0.012	0.056	0.097	0.026	0.018	STD

RNN					
ATTENTION = FALSE					
ACCURACY	PRECISSION	RECALL	F	TEST ERROR	
0.774	0.758	0.792	0.775	0.481	
0.749	0.689	0.890	0.777	0.565	
0.739	0.769	0.668	0.715	0.572	
0.717	0.852	0.512	0.639	0.654	
0.772	0.823	0.682	0.746	0.523	
0.750	0.778	0.709	0.730	0.559	AVARAGE
0.024	0.063	0.142	0.057	0.064	STD

GRU					
ATTENTION = TRUE					
ACCURACY	PRECISSION	RECALL	F	TEST ERROR	
0.749	0.834	0.61	0.704	0.828	
0.76	0.698	0.902	0.787	0.663	
0.76	0.89	0.584	0.705	0.707	
0.796	0.773	0.827	0.799	0.53	
0.787	0.791	0.769	0.78	0.523	
0.770	0.797	0.738	0.755	0.650	AVARAGE
0.020	0.071	0.138	0.047	0.128	STD

GRU					
ATTENTION = FALSE					
ACCURACY	PRECISSION	RECALL	F	TEST ERROR	
0.734	0.874	0.535	0.664	0.869	
0.739	0.669	0.925	0.776	0.648	
0.742	0.856	0.570	0.684	0.787	
0.768	0.716	0.876	0.788	0.523	
0.726	0.902	0.495	0.640	0.844	
0.742	0.803	0.680	0.710	0.734	AVARAGE
0.016	0.104	0.204	0.068	0.146	STD

LSTM					
ATTENTION = TRUE					
ACCURACY	PRECISSION	RECALL	F	TEST ERROR	
0.796	0.829	0.736	0.780	0.555	
0.774	0.724	0.871	0.791	0.590	
0.734	0.883	0.528	0.661	0.705	
0.789	0.760	0.834	0.795	0.565	
0.736	0.788	0.537	0.667	0.757	
0.766	0.815	0.701	0.739	0.634	AVARAGE
0.029	0.071	0.162	0.069	0.091	STD

LSTM					
ATTENTION = FALSE					
ACCURACY	PRECISSION	RECALL	F	TEST ERROR	
0.726	0.871	0.519	0.650	0.861	
0.781	0.739	0.855	0.793	0.498	
0.735	0.851	0.558	0.674	0.767	
0.789	0.843	0.701	0.765	0.582	
0.740	0.811	0.612	0.698	0.602	
0.754	0.823	0.649	0.716	0.662	AVARAGE
0.029	0.051	0.134	0.061	0.148	STD