

GRU										
HIDDEN	DEPTH	DROPOUT	BIDIRECTIONAL	ACCUARACY	PRECISION	RECALL	F	TEST ERROR	STD	
150	2	0.0	False	0.771	0.724	0.860	0.786	0.530	0.007	
100	2	0.0	False	0.789	0.743	0.871	0.802	0.468		
170	2	0.0	False	0.796	0.780	0.813	0.796	0.461		
200	2	0.0	False	0.799	0.814	0.766	0.789	0.497		
150	3	0.0	False	0.776	0.840	0.673	0.747	0.587	0.029	
150	4	0.0	False	0.800	0.779	0.829	0.803	0.482		
150	5	0.0	False	0.788	0.850	0.689	0.761	0.544		
150	2	0.1	False	0.787	0.763	0.820	0.791	0.500	0.006	
150	2	0.4	False	0.781	0.752	0.827	0.788	0.504		
150	2	0.7	False	0.769	0.733	0.834	0.780	0.507		
150	2	0.0	False	0.771	0.724	0.860	0.786	0.530		
150	2	0.0	True	0.804	0.801	0.799	0.800	0.448	0.010	

RNN										
HIDDEN	DEPTH	DROPOUT	BIDIRECTIONAL	ACCUARACY	PRECISION	RECALL	F	TEST ERROR	STD	
150	2	0.0	False	0.783	0.785	0.769	0.777	0.512	0.017	
100	2	0.0	False	0.761	0.712	0.862	0.780	0.551		
170	2	0.0	False	0.779	0.757	0.808	0.782	0.516		
200	2	0.0	False	0.773	0.813	0.699	0.751	0.525		
150	3	0.0	False	0.767	0.707	0.897	0.791	0.501	0.005	
150	4	0.0	False	0.772	0.735	0.836	0.783	0.515		
150	5	0.0	False	0.784	0.755	0.829	0.791	0.487		
150	2	0.1	False	0.764	0.703	0.900	0.789	0.504	0.004	
150	2	0.4	False	0.772	0.723	0.867	0.789	0.497		
150	2	0.7	False	0.740	0.664	0.949	0.782	0.550		
150	2	0.0	False	0.783	0.785	0.769	0.777	0.512	0.001	
150	2	0.0	True	0.773	0.747	0.813	0.779	0.481		

LSTM										
HIDDEN	DEPTH	DROPOUT	BIDIRECTIONAL	ACCUARACY	PRECISION	RECALL	F	TEST ERROR	STD	
150	2	0.0	False	0.784	0.788	0.766	0.777	0.474	0.007	
100	2	0.0	False	0.787	0.764	0.818	0.790	0.453		
170	2	0.0	False	0.787	0.791	0.769	0.780	0.463		
200	2	0.0	False	0.786	0.752	0.841	0.794	0.462		
150	3	0.0	False	0.786	0.796	0.757	0.776	0.473	0.009	
150	4	0.0	False	0.780	0.737	0.857	0.793	0.458		
150	5	0.0	False	0.792	0.810	0.755	0.781	0.532		
150	2	0.1	False	0.774	0.730	0.857	0.788	0.492	0.001	
150	2	0.4	False	0.774	0.732	0.850	0.787	0.486		
150	2	0.7	False	0.773	0.729	0.855	0.787	0.486		
150	2	0.0	False	0.784	0.788	0.766	0.777	0.474	0.007	
150	2	0.0	True	0.761	0.700	0.900	0.787	0.505		

Best Hiparam	VALUES
CELL	GRU
HIDDEN	100
DEPTH	4
DROPOUT	0.1
BIDIRECTIONAL	TRUE

ACCUARACY	PRECISION	RECALL	F	TEST ERROR	
0.786	0.841	0.694	0.761	0.498	
0.782	0.754	0.825	0.788	0.480	
0.751	0.850	0.598	0.702	0.571	
0.774	0.739	0.834	0.784	0.530	
0.795	0.845	0.713	0.773	0.478	
0.778	0.806	0.733	0.762	0.511	AVARAGE
0.016	0.055	0.098	0.035	0.039	STD

Best Hiparam	VALUES
CELL	RNN
HIDDEN	100
DEPTH	3
DROPOUT	0.1
BIDIRECTIONAL	TRUE

ACCUARACY	PRECISION	RECALL	F	TEST ERROR	
0.764	0.703	0.900	0.789	0.507	
0.763	0.713	0.864	0.781	0.498	
0.757	0.821	0.645	0.723	0.505	
0.768	0.755	0.783	0.768	0.472	
0.779	0.731	0.869	0.794	0.482	
0.766	0.744	0.812	0.771	0.493	AVARAGE
0.008	0.047	0.103	0.029	0.015	STD

Best Hiparam	VALUES
CELL	LSTM
HIDDEN	100
DEPTH	4
DROPOUT	0.1
BIDIRECTIONAL	TRUE

ACCUARACY	PRECISION	RECALL	F	TEST ERROR	
0.744	0.776	0.673	0.721	0.597	
0.803	0.825	0.759	0.791	0.477	
0.757	0.853	0.610	0.711	0.614	
0.808	0.821	0.780	0.800	0.453	
0.811	0.833	0.769	0.800	0.450	
0.785	0.822	0.718	0.764	0.518	AVARAGE
0.032	0.028	0.074	0.044	0.081	STD