Experiments

Performance Comparison

Category	Method	Accuracy	AUC-ROC	Fake News			Real News		
				Precision	Recall	F_1	Precision	Recall	F_1
Supervised	LIWC-LR	0.528	0.558	0.604	0.160	0.253	0.517	0.896	0.655
	LIWC-SVM	0.568	0.598	0.574	0.521	0.546	0.563	0.614	0.587
	LIWC-RF	0.590	0.616	0.613	0.483	0.541	0.574	0.696	0.629
	LSTM	0.733	0.799	0.876	0.543	0.670	0.669	**0.923**	0.775
	CNN	0.747	0.834	0.869	0.580	0.696	0.685	0.913	0.783
	EANN	0.767	0.803	0.863	0.634	0.731	0.711	0.899	0.794
Semi-supervised	$LSTM_{semi}$	0.753	0.841	0.854	0.611	0.713	0.697	0.895	0.784
	CNN_{semi}	0.759	0.848	0.850	0.630	0.723	0.706	0.889	0.787
Automatically annotated	WeFEND–	0.807	0.858	0.846	**0.751**	0.795	0.776	0.863	0.817
	WeFEND	**0.824**	**0.873**	**0.880**	**0.751**	**0.810**	**0.783**	0.898	**0.836**

- The advantage of WeFEND is that it can automatically annotate unlabeled news, the performance of WeFEND– is better than models in the supervised and semi-supervised

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- To reduce the influence of noisy labels, WeFEND has the data selector component based on reinforcement learning techniques, precision values of WeFEND are improved compared with WeFEND-