Experiments
Evaluation Questions

- EQ1: Are Dual Emotion Features more effective than baseline features when used alone for fake news detection? How effective are the different types of features in Dual Emotion Features?

- EQ2: Can Dual Emotion Features help improve the performance of text-based fake news detectors?

- EQ3: How robust do the fake news detection models with Dual Emotion Features in real-world scenarios?

- EQ4: How effective are the components of Dual Emotion Features, including the publisher emotion, social emotion, and emotion gap?

Experiments
Performance Comparison: RumourEval-19

Models	Macro F1 score	RMSE	F1 score		
			Fake News	Real News	Unverified News
BiGRU	0.269	0.804	0.500	0.222	0.083
+ Emoratio	0.275	0.823	0.463	0.160	**0.200**
+ EmoCred	0.311	0.797	0.456	0.295	0.182
+ **Dual Emotion Features**	**0.340**	**0.752**	**0.580**	**0.337**	0.104
BERT	0.272	0.808	0.533	0.105	0.176
+ Emoratio	0.271	0.857	0.406	0.240	0.167
+ EmoCred	0.308	0.833	0.367	**0.367**	0.189
+ **Dual Emotion Features**	**0.346**	**0.778**	**0.557**	0.244	**0.238**
NileTMRG	0.309	0.770	0.557	0.245	0.125
+ Emoratio	0.331	**0.754**	**0.571**	0.280	**0.143**
+ EmoCred	0.307	0.786	0.296	0.500	0.125
+ **Dual Emotion Features**	**0.342**	**0.754**	0.565	**0.565**	0.100

- After using Dual Emotion Features, the three fake news detectors are improve a lot.