Experiments
Research Questions

- **RQ1:** How are the performances of the proposed UPFD framework compared to previous works?

- **RQ2:** What are the contributions of endogenous/exogenous information and other variants of the proposed framework?

Experiments

RQ2: Ablation Study: Encoder Variants

Feature	POL				GOS			
	GraphSAGE		GCNFN		GraphSAGE		GCNFN	
	ACC	F1	ACC	F1	ACC	F1	ACC	F1
Profile	77.38	77.12	76.94	76.72	92.19	92.16	89.00	88.96
word2vec	80.54	80.41	80.54	80.41	96.81	96.80	94.97	94.95
BERT	**84.62**	**84.53**	83.26	83.14	**97.23**	**97.22**	96.18	96.17

- Table show performance of 2 GNN variants using 3 different node features.

- GraphSAGE: a GNN to learn node embeddings via aggregating neighbor nodes information

- GCNFN: a GNN-based fake news detection model which leverages two GCN layers to encode the news propagation graph

- Endogenous features (word2vec & BERT) are consistently better than the profile feature (only encodes the user profile information)

- Also observe that GraphSAGE+BERT have the average best performance among others

Note that the BERT performance could be further improved via fine-tuning, and authors leave it as future work.