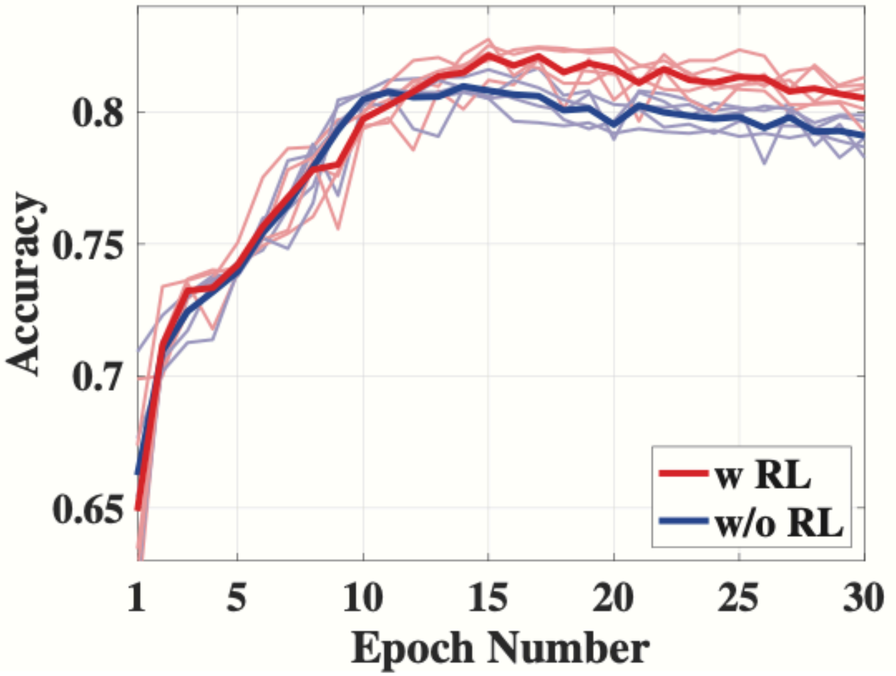
Experiments

Insight Analysis

- As the probability output from fake news detection model can provide more information for the reinforced selector
  - Observe that the average accuracy of the model with reinforced selector is stably higher than that w/o reinforced selector after 12 epochs
- The ablation study shows that the designed reinforced selector is effective in improving the performance of fake news detection



Conclusion

- Proposed to investigate the important problem of fake news detection.
  - The dynamic nature of news make it infeasible to obtain continuously labeled high quality samples for training effective models
- Proposed a novel framework that can leverage user reports as weak supervision for fake news detection
- The reinforced selector based on reinforcement learning techniques chooses high-quality samples from those labeled by the annotator
  - By enhancing the quality and size of the training set, the proposed framework thus has shown significantly improved performance in fake news detection