TMIF: Transformer-Based Multi-Modal Interactive Fusion for Rumor Detection

Authors : Jiandong Lv, Xingang Wang, Cuiling Shao

Abstract : The rapid development of social media platforms has made it one of the important news sources. While it provides people with convenient real-time communication channels, fake news and rumors are also spread rapidly through social media platforms, misleading the public and even causing bad social impact in view of the slow speed and poor consistency of artificial rumor detection. We propose an end-to-end rumor detection model-TIMF, which captures the dependencies between multimodal data based on the interactive attention mechanism, uses a transformer for cross-modal feature sequence mapping and combines hybrid fusion strategies to obtain decision results. This paper verifies two multi-modal rumor detection datasets and proves the superior performance and early detection performance of the proposed model.

Keywords : hybrid fusion, multimodal fusion, rumor detection, social media, transformer
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