Multi-modal False Information Detection for Combating COVID-19 Infodemic

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1 INTRODUCTION

While the COVID-19 pandemic continues its global devastation, numerous accompanying challenges emerge. One critical research challenge is how to effectively identify false information on social media (e.g., Twitter, Facebook). Those false information can take advantage of multimedia content to mislead readers and get dissemination, which can cause detrimental effects or even manipulate the public events. Conventional methods merely relying on the text content, which may be ineffective for detecting the false information on this new pandemic due to: (1) they are highly deceptive and requires intensive domain-knowledge to distinguish; and (2) the novel language usage and rapid change of information amplify the detection difficulty. To better prevent the spread of the infodemic, we should not only consider the text content, but also the other information modalities, such as social context, knowledge graph, and spatio-temporal information. To this end, we discuss its necessity of incorporating multi-modal information for combating COVID-19 false information. In the meantime, by understanding the challenges of achieving the goal, we also appreciate the importance of collaborative research for effectively and efficiently combating the COVID-19 infodemic.

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