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Have you been misinformed?

Computational tools and analysis of our interactions with false and corrective information

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ABSTRACT

Misinformation has always been part of humankind's information ecosystem. The development of tools and methods for automatically detecting the reliability of information has received a great deal of attention in recent years, such as calculating the authenticity of images, calculating the likelihood of claims, and assessing the credibility of sources. Unfortunately, there is little evidence that the presence of these advanced technologies or the constant effort of fact-checkers worldwide can help stop the spread of misinformation. I will try to convince you that you also hold various false beliefs, and argue for the need for technologies and processes to assess the information shared by ourselves or by others, over a longer period of time, in order to improve our knowledge of our information credibility and vulnerability, as well as those of the people we listen to. Also, I will describe the benefits, challenges, and risks of automated information corrective actions, both for the target recipients and their wider audience.

CCS CONCEPTS

• **Information systems** → **Social networking sites**; • **Human-centered computing** → **Empirical studies in collaborative and social computing**; *Social content sharing*; **Social media**.

KEYWORDS

misinformation, fact-checking, twitter, social media

1 BIOGRAPHY

Harith Alani is a Professor and Deputy Director at the Knowledge Media institute, The Open University in the UK. He's the founder and leader of the interdisciplinary Social Data Science research group, which focuses on applying AI and computational social science methods to model, understand and track various social phenomena on the web, and in particular on social media. In recent years, the work of Prof Alani concentrated on studying online misinformation, supported by several international projects, including HERoS;[1] to study the dynamics of COVID19 related misinformation and fact-checks, Co-Inform;[2] to analyse individuals' interaction with misinformation on social media, and CIMPLE;[3] to investigate knowledge-based explanations of misinformation detection techniques. Prof Alani was featured in the BBC Ideas "Can you spot digital lies?", and his work on COVID19 misinformation was recently covered by various news outlets. Of a special interest to Harith's research on misinformation is the inter dynamics of false claims and their corresponding fact-checks, and the use of computational approaches to assess the information reliability of individuals on social media and the impact of actively correcting their misinforming messages. Prof Alani is an active member of the Semantic Web, Web Science, and The Web Conference communities. He was the General Chair of the International Semantic Web Conference in 2021, and Co-Chaired the Web Content Analysis, Semantics, and Knowledge track at The Web Conference in 2018.

[1] https://www.heros-project.eu/
[2] https://coinform.eu/
[3] https://www.chistera.eu/projects/cimple