

Misinformation Dissemination on the Web

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ABSTRACT

Misinformation dissemination is a topic that has gained a lot of attention from academia and public media, in general. Despite a rich literature on strategies to detect and mitigate this phenomenon, the problem still persists with impact on several sectors of the society. In this talk, I will discuss the problem, revise existing approaches as well as discuss challenges to properly address it. I will also discuss recent results of our group on the investigation of misinformation spread on WhatsApp.

CCS CONCEPTS

• **Information systems** → **Collaborative and social computing systems and tools**; **Social networks**; *Data analytics*.

KEYWORDS

misinformation dissemination, online social networks, automatic detection

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1 OUTLINE

The great popularity of various Web applications, notably social media and online social networks, has greatly contributed to turn it into one of the major sources of information for a large portion of the population. The easiness at which one can search, find and spread a piece of information, in various media types, has unquestionably revolutionized the processes guiding information dissemination in modern society. A side effect is that an old “phenomenon”, gossiping and rumors, or more broadly speaking, misinformation dissemination, has gained scale and speed.

Misinformation, a broad term often used to refer to false or inaccurate information possibly spread with intention to deceive, is a topic that has attracted a lot of attention in the recent years [1–4, 11]. There is a rich literature addressing this topic in various applications and domains, offering analyses, characterizations, and potential countermeasures (e.g., [5–10, 12, 13], to name a few examples). Yet, the problem persists as user behavior evolves and new applications emerge.

In this talk, I will discuss misinformation on the Web, showing examples and practical implications, and related phenomena that

contribute to its spread. I will revise some existing solutions to detect misinformation and their disseminator, and discuss challenges to properly address the problem, covering aspects related to the role of user participation and characteristics of emerging applications that may facilitate their spread.

Finally, focusing specifically on WhatsApp, a messaging app of enormous popularity in various countries, I will present some recent results on the spread of misinformation on the platform and how it differs from the other contents, hinting at possible approaches to mitigate the process.

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