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Editorial

## Research Advances on User Interactions in Social Media Using Data Science Approaches

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We are delighted to welcome readers to this Special Issue on "Research Advances on User Interactions in Social Media Using Data Science Approaches". As an Internet user may perceive, new media platforms and social networks shape how individuals relate to others [1,2]. Further, there is no doubt that the contents of social networks and new media platforms define how most of society perceives itself. From news and fake news posted on social networks to images and videos [3–5], and their filters, to so-called challenges or new applications, such as virtual reality or augmented reality [6], the technology surrounding human communication on the internet is changing how we communicate and how we experience human interactions and human-computer interactions. Moreover, the eruption of algorithms that curate what people see and what information is received on social networks, depending on their desires, engagement, interaction, or personal information, is changing how people relate to society or their echo chambers [7]. After years of witnessing the incorporation of technological innovations in human communication and how to share our ideas with others, maybe it is time to analyze how technology affects us; how we understand what we consume on social networks and new media; and how we interact with the content and with others. Moreover, the need for an in-depth analysis is even more critical in the aftermath of the COVID-19 pandemic [8,9], a period during which millions of people worldwide interacted with others primarily via the internet. This Special Issue aims to reflect on recent research on how users interact and understand content in new media and social networks and how social networks affect users' desires, feelings, or ideas from the perspective of Information Science and Data Science. We are sure that the papers included in this Special Issue will open up avenues for discussions on how users behave in social networks and how they experience and are exposed to information and its implications.

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## References

1. Wilson, C.; Boe, B.; Sala, A.; Puttaswamy, K.P.; Zhao, B.Y. User interactions in social networks and their implications. In Proceedings of the 4th ACM European Conference on Computer Systems, Nuremberg, Germany, 1–3 April 2009; pp. 205–218. [CrossRef]

- 2. Jin, L.; Chen, Y.; Wang, T.; Hui, P.; Vasilakos, A.V. Understanding user behavior in online social networks: A survey. *IEEE Commun. Mag.* **2013**, *51*, 144–150. [CrossRef]
- 3. García-Sánchez, F.; Therón, R.; Gómez-Isla, J. Visual Literacy in New Media: Systematic Review and Mapping of the Literature. *Educ. Knowl. Soc.* **2019**, 20, 6-1–6-44. [CrossRef]
- 4. García-Sánchez, F.; Gómez-Isla, J.; Therón, R.; Casado-Lumbreras, C. Assessing Visual Literacy in the Consumers of New Technologies: A Cultural Perspective. *Int. J. Hum. Cap. Inf. Technol. Prof. (IJHCITP)* **2019**, *10*, 1–21. [CrossRef]
- García-Sánchez, F.; Gómez-Isla, J.; Therón, R.; Cruz-Benito, J.; Sánchez-Prieto, J.C. Developing a Research Method to Analyze Visual Literacy Based on Cross-Cultural Characteristics. In *Global Implications of Emerging Technology Trends*; García-Peñalvo, F.J., Ed.; IGI Global: Hershey, PA, USA, 2018; pp. 19–33. [CrossRef]
- 6. Flavián, C.; Ibáñez-Sánchez, S.; Orús, C. User responses towards augmented reality face filters: Implications for social media and brands. In *Augmented Reality and Virtual Reality*; tom Diek, M.C., Jung, T.H., Loureiro, S.M.C., Eds.; Springer: Cham, Switzerland, 2021; pp. 29–42. [CrossRef]
- 7. Huszár, F.; Ktena, S.I.; O'Brien, C.; Belli, L.; Schlaikjer, A.; Hardt, M. Algorithmic amplification of politics on Twitter. *Proc. Natl. Acad. Sci. USA* **2021**, *119*, e2025334119. [CrossRef] [PubMed]
- 8. Hung, M.; Lauren, E.; Hon, E.S.; Birmingham, W.C.; Xu, J.; Su, S.; Hon, S.D.; Park, J.; Dang, P.; Lipsky, M.S. Social network analysis of COVID-19 sentiments: Application of artificial intelligence. *J. Med. Internet Res.* **2020**, 22, e22590. [CrossRef]
- 9. Mourad, A.; Srour, A.; Harmanani, H.; Jenainati, C.; Arafeh, M. Critical impact of social networks infodemic on defeating coronavirus COVID-19 pandemic: Twitter-Based study and research directions. *IEEE Trans. Netw. Serv. Manag.* 2020, 17, 2145–2155. [CrossRef]