

## On the Detection of Fake News and Conspiracy Theories

**Paolo Rosso**

Universitat Politècnica de València,  
Spain  
prossso@dsic.upv.es

### Abstract

The rise of social media has offered a fast and easy way for the propagation of fake news and conspiracy theories. Despite the research attention that has received, fake news detection remains an open problem and users keep sharing texts that contain false statements. In this keynote we will describe how to go beyond textual information to detect fake news. In fact, affective information and visual information need also to be taken into account because providing important insights on how fake news spreaders aim at triggering certain emotions in the readers. We will also see how psycho-linguistic patterns and users' personality traits may play an important role in discriminating fake news spreaders from fact checkers. Finally, we will focus on the role of users in the propagation of conspiracy theories.

**DOI:** 10.28995/2075-7182-2021-20-XX-XX

### Professional activities

Paolo Rosso (<http://personales.upv.es/prossso/>) is Full Professor at the Universitat Politècnica de València, Spain where he is also a member of the PRHLT research center. His research interests are focused on social media data analysis, mainly on author profiling, irony detection, fake news, and hate speech detection. Since 2009 he has been involved in the organization of PAN benchmark activities, mainly in the framework of CLEF, where he is also deputy steering committee chair for the conference, and FIRE evaluation forums, on plagiarism/text reuse detection and author profiling. He has been PI of several national and international research projects funded by EC, U.S. Army Research Office, and Qatar National Research Fund. At the moment he is the PI of MIS-MIS-FAKENHATE, a research project funded by the Spanish Ministry of Science and Innovation on Misinformation and Miscommunication in social media: FAKE news and HATE speech. He is associate editor at Information Processing & Management. He is co-author of 50+ articles in international journals and 400+ articles in conferences and workshops. He's academic advisor at the Laboratory for Social & Cognitive Informatics of National Research University Higher School of Economics in St.Petersburg.