The Spread of Misinformation in Social Media

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ABSTRACT

As social media become major channels for the diffusion of news and information, they are also increasingly attractive and targeted for abuse and manipulation [2, 3]. This talk overviews ongoing network analytics, data mining, and modeling efforts to understand the spread of misinformation online and offline. I present machine learning methods to detect astroturf [6] and social bots [4, 7], and outline initial steps toward computational fact checking [1], as well as theoretical models to study how truthful and truthy facts compete for our collective attention [9, 8]. These efforts will be framed by a case study in which, ironically, our own research became the target of a coordinated disinformation campaign [5].

Keywords

Social media, Twitter, diffusion networks, misinformation, social bots, astroturf, hoaxes, echo chambers, social bubbles, fact checking

Acknowledgments

The work presented in this talk was carried out in collaborations with current and past students, postdocs, and colleagues in the Center for Complex Networks and Systems Research at Indiana University (cnets.indiana.edu). This research is supported in part by the National Science Foundation (grant CCF-1101743), DARPA (grant W911NF-12-1-0037), and the J. S. McDonnell Foundation (grant 220020274). Opinions, findings, and conclusions or recommendations in this material are those of the author and do not necessarily reflect the views of these funding agencies.

Bio

Filippo Menczer is a professor of informatics and computer science, adjunct professor of physics, and a member of the cognitive science program at Indiana University, Bloomington. He holds a Laurea in Physics from the University of Rome and a Ph.D. in Computer Science and Cognitive Science from the University of California, San Diego. Dr. Menczer has been the recipient of Fulbright, Rotary Foundation, and NATO fellowships, and a Career Award from the National Science Foundation. He currently serves as director of the Center for Complex Networks and Systems Research and is a Fellow of the Institute for Scientific Interchange Foundation in Torino, Italy, a Senior Research Fellow of The Kinsey Institute, and an ACM Distinguished Scientist. He previously served as division chair in the IUB School of Informatics and Computing, and was Fellow-at-large of the Santa Fe Institute. His research focuses on Web science, social networks, social media, social computation, Web mining, distributed and intelligent Web applications, and modeling of complex information networks. His work has been covered in many US and international news sources, including *The New York Times, Wall Street Journal, Washington Post, NPR, CNN, BBC, Nature,* and *Science.*

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WWW'16 Companion, April 11–15, 2016, Montréal, Québec, Canada.
ACM 978-1-4503-4144-8/16/04.
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