

Master project 2020-2021

Personal Information

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Project

Web development & bioinformatic tools

Project Title:

Dynamics of spreading false health news on social networks [RRSSalud]

Keywords:

Health, Fake News, Social Media

Summary:

Summary The RRSSalud is a research project that aims at investigating the typology and dynamics of dissemination on social media of fake news in the area of health. By combining quantitative methodologies (statistical analysis and social network analysis) and qualitative techniques (content analysis and focus groups), we explore the attitudes of people regarding the health information they consume. Specifically, we plan to focus on understanding the ability of Internet users to distinguish between false and true content, as well as, the tactics and strategies they use to detect the trustworthiness of news. In addition, topics, morphologies and rhetorical strategies of fake news will be explored. The investigation is coordinated by three teams of researchers from the University of Navarra and the Barcelona Supercomputing Center. As a result, we expect to develop tools, methods, and guidelines that can be employed by public health institutions, media organizations, and the general public to counteract the dissemination of fake news.

Introduction In 2017, the Royal Spanish Academy incorporated a new word into the Dictionary of the Spanish Language: post-truth, which is defined as the "deliberate distortion of a reality, which manipulates beliefs and emotions in order to influence public opinion and social attitudes." The incorporation into the language of this neologism is a symbol of a serious current problem: the organized dissemination of false information, mainly through social media, in order to manipulate the public opinion. This phenomenon, popularly known as false news or "fake news" [1], has shown to have a significant impact in multiple areas and situations in recent years. In the political arena, for example, it has been found that it significantly influenced the results of the Brexit referendum and the 2016 presidential elections in the United States [2]. In business, the phenomenon of disseminating hoaxes and biased information has been identified as a way to deliberately discrediting brands and companies [3]. Information on the environment has also been a fertile area of lies and half-truths, especially with regard to the information on climate change [4]. However, the area of health is one of the areas where disinformation can cause profound damages [5], with anti-vax campaigns or health recommendations on epidemic periods to name a few. RRSSalud project focuses on studying fake news in health-care published on social media in Spain. The aim of the project is to explain the relationship between the vulnerability of Internet users to fake news and the dynamics of propagation and repercussion of these contents on social media. By combining experimental research with quantitative and qualitative methods we plan to explore the phenomenon from a holistic and comprehensive perspective. Specifically, the goals of the project are: i) identify the typology of fake news in the area of health and disseminated on social media in Spain; i) assess the vulnerability of Spain's Internet users to fake news; iii) profile population groups in relation to their critical capacity to identify fake news; iv) understand the dynamics dissemination of fake news and propose actions to mitigate

its impact; v) identify the subjective aspects that lead to giving credit to fake news and promote its subsequent dissemination by users.

References:

1 Quandt, T., Frischlich, L., Boberg, S., & Schatto - Eckrodt, T. (2019). Fake news. The International Encyclopedia of Journalism Studies, 1-6. 2 Bastos, M. T., & Mercea, D. (2019). The Brexit botnet and user-generated hyperpartisan news. Social Science Computer Review, 37 (1), 38-54; Rose, J. (2017). Brexit, Trump and Post-Truth Politics, Public Integrity, 19 (6), 555-558. 3 Berthon, P. R., & Pitt, L. F. (2018). Brands, truthiness and post-fact: managing brands in a post-rational world. Journal of Macromarketing, 38 (2), 218-227. 4 Kolmes, S.A. (2011). Climate change: a disinformation campaign. Environment: Science and Policy for Sustainable Development, 53 (4), 33-37. 5 Viviani, M., & Pasi, G. (2017). Credibility in social media: opinions, news, and health information — a survey. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 7 (5), e1209.

Expected skills::

Experience with software development and at least one of the following: Proficiency in Python programming language / Proficiency in web programming languages and frameworks (e.g., Javascript, HTML, CSS, Django/Flask) // Ideally, some experience with Python data science tools (e.g., Pandas, Numpy, Jupyter Notebooks, Scikit-learn, Matplotlib/Seaborn) to obtain, curate, clean, analyze, and visualization of information // Ability to work in an interdisciplinary social-tech environment and interact with relevant stakeholders to understand their needs and formulate solutions

Possibility of funding::

Yes

Possible continuity with PhD: :

To be discussed

Comments:

RRSSalud is one of the five projects funded by BBVA Foundation as part of its program Scientific Research Teams in Economics and Digital Society. The work will be supervised by Nataly Buslón, Jorge Saldivar, and Maria José Rementeria.
