



Title: Understanding Multimodal Misinformation Diffusion

Acronym: U-MIND

Project leader: Juan Gómez Romero

Host organisation: Universidad de Granada

Main purpose of the project: U-MIND aims to perform a quantitative study on whether multimodal misinformation in Twitter (including images, sound, and video) has a broader reach and a higher impact than textual misinformation. The project focuses on the COVID-19 *infodemics* events that happened from March 2020 to September 2021.

Design/methodology/approach: The methodology of U-MIND combines quantitative methods in Social Science with Machine Learning techniques to collect, augment, and analyze Twitter data. These data will be semi-automatically annotated by relying on a curated dataset provided by Maldita, one of the leading fact-checking organizations in Spain.

Potential results: U-MIND will increase our understanding of how misinformation is brought forward in social media. Specifically, the project will unveil the patterns of multimodal misinformation spreading during the COVID crisis. We will also publish a pseudo-anonymized excerpt of the dataset used in the study.

Social relevance of the research: The proliferation of misinformation on social and digital media is a serious societal challenge with documented negative impacts on individuals and organizations. U-MIND will provide policymakers, tool developers, and citizens with knowledge for, e.g., the implementation of countermeasures and the design of media literacy campaigns.

Originality/value of the project: U-MIND considers images, audio, video, and text, and not solely the latter. Furthermore, the project leverages advanced Machine Learning techniques to expand the analysis beyond human-curated data. Finally, the project processes content in Spanish, whereas most computational tools are tailored to the English language.