



Call for Papers

Special Issue on

Interpretability and Explainability of Sentimental Analysis based on Social Media Platforms

The opportunities offered by social media platforms are invaluable tools for capturing and analyzing public opinion. Research methods that help moderate, understand and analyze elements of social behaviour, relationships, and affective states based on observable activity are being developed simultaneously as part of social computing, emotion recognition, and affective computing research. The modern practice of sentiment analysis has evolved into a more comprehensive study of affect and emotion recognition. In addition, online opinions can be expressed in the form of text reviews or ratings, which can be given to a product as a whole or each of its components individually. Artificial intelligence (AI)-driven models, particularly deep-learning models, have achieved excellent results on a variety of natural language processing (NLP) tasks, especially sentimental analysis. These models have been particularly successful in analyzing online reviews and opinions from social media platforms. By leveraging information from social media platforms (e.g., Twitter, and Facebook) and using artificial intelligence-based models, it is possible to make very accurate predictions. However, for a model to classify data into different sentiment categories, it must have some knowledge of the intrinsic characteristics of the data as well as the representations of those characteristics. Most of the currently available models do not explain the reasons behind the process by which judgments are made. In other words, these black-box algorithms lack interpretability and explainability. In addition, it is not always possible to collect extensive data for analysis when working with NLP activities, which is also needed to be addressed at the current limitation. Thus, the use of XAI technologies will make it possible to improve predictive accuracy while improving the understanding of decisions and the tracking of actions performed.

In this special issue, our goal is to strengthen the link between the field of sentimental analytics and AI-driven models (e.g., XAI), especially in terms of their interpretability and explainability. Below are some of the interesting topics we will cover:

- Explain and interpret the sentimental prediction results
- A semantic framework for sentimental analysis
- XAI for sentimental and emotional analytics in social media data
- NLP models for sentimental analytics using XAI
- Affective computing by XAI
- Personalized sentimental analytics by XAI
- Cyber-bullying detection using XAI
- Multilingual aspects of sentiment analysis by XAI
- Explainable sarcasm and irony detection
- Multimodal sentiment analysis
- Interpretability classification of sentimental analytics
- Mental health analytics by XAI
- Management of sentimental emotions and options

Important Dates:

- Submission deadline: 30th Nov 2023
- First-round review: 30th Jan 2024
- Second round review: 30th March 2024
- Notification of final decision: 30th May 2024

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