How to best analyze big social data

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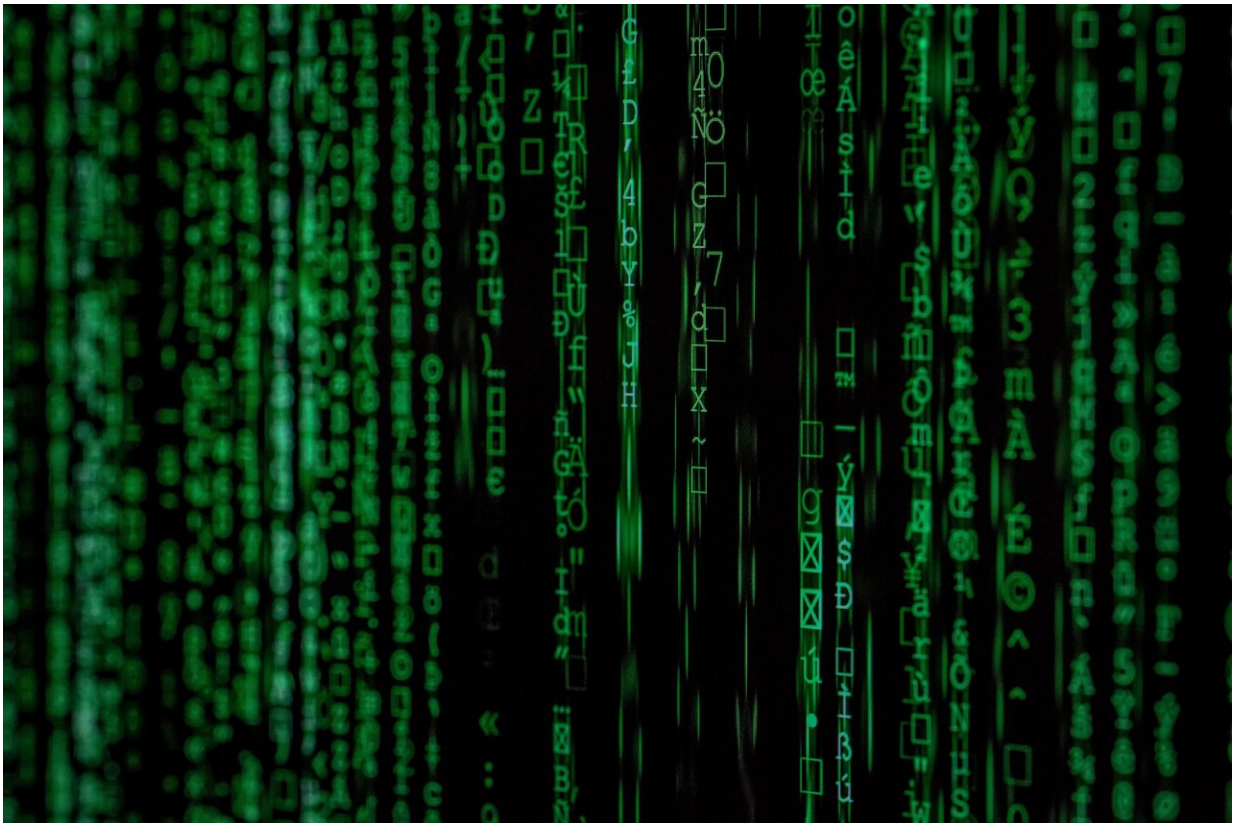

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Big data is big, as it were, and the buzz phrase is often accompanied by associated terms such as data mining, machine learning, computational intelligence, the semantic web, and social networks. Research published in the *International Journal of Cloud Computing* looks at big data in this context and asks how social big data might best be analyzed with state-of-

the-art tools to allow us to extract new knowledge.

Social media and social networking represent a vast information resource with hundreds of millions of people using dozens of tools, such as Twitter, Instagram, and Facebook on a daily basis and posting billions of updates, images, videos, and much more. All of this information, much of it publicly accessible might well be mined for useful knowledge that could, in turn, be useful to a wide range of third parties in various types of business, not-for-profit organizations, law enforcement, those in commerce and marketing, researchers in socioeconomics, healthcare, and many other fields.

Brahim Lejdel of the University of El-Oued in El-Oued, Algeria, points out that the combination of big data technologies and traditional machine learning algorithms has already led to some new and interesting challenges for social media and social networking. Among the challenges are how best to process, store, represent, and visualize the vast repositories of information that big data represents.

The new research uses a hybrid approach of multi-agent systems and algorithms. It offers what Lejdel describes as a "new approach that can extract entities and their relationships from social big data." This, he suggests, will allow researchers to pull meaningful knowledge from big data. Lejdel points out that research into big data and social network is in its infancy, of course. Each small step in research takes us closer to understanding and making use of big data and addressing those challenges.

In the current work, he proposes what he describes as "a conceptual model helping decision-makers and customers to find the most relevant solutions that are currently available for extracting, managing, controlling, analysis and visualize knowledge in social media for better user experiences and services."

More information: Brahim Lejdel, Analysing knowledge in social big data, *International Journal of Cloud Computing* (2022). DOI: 10.1504/IJCC.2021.120388

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