

Tracking the spread of disease on social media

April 2 2020, by David Bradley



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For many years, researchers have turned to the public logs of search engine terms to help them track the spread of disease. They can analyze the keywords and phrases that people use and when they become

interested in a disease or have symptoms. Much value has been recognized in this kind of disease tracking and it has been used to research influenza outbreaks, the spread of MERS and the Zika virus, and other health problems. At the time of writing, it is approximately three months since we first recognized the emergence of a new coronavirus in China that would ultimately become known as the pathogen to cause the novel pandemic disease, Covid-19.

Writing in the *International Journal of Web and Grid Services*, in rather prescient work undertaken long before the [disease](#) name Covid-19 had been coined, a team from Gachon University in Korea, was asking whether social media content might be harvested to allow researchers to spot the emergence of new diseases and to track them once they appear.

SoYeop Yoo, DaeHo Kim, SungMin Yang, and OkRan Jeong of the Department of Software at Gachon University, explain how social media has become as a sensor for a wide range of topics in almost every area of human endeavor. Mining the vast daily output of this realm is a daunting task, but it can be done and many trends in politics, finance, science, health, medicine, entertainment, celebrity, and beyond can be tracked.

The team has now built a workflow that allows them to carry out real-time processing of [social media](#) data and to develop a model that manages the data and can detect the emergence of disease accurately. "If we can detect information about an infectious disease in real time, we can cope with it more quickly," the team suggests. Moreover, "We can obtain information about the symptoms of specific diseases and hospital information by analyzing various opinions and [information](#) on the disease."

More information: SoYeop Yoo et al. Real-time disease detection and analysis system using social media contents, *International Journal of Web and Grid Services* (2020). [DOI: 10.1504/IJWGS.2020.106103](https://doi.org/10.1504/IJWGS.2020.106103)

Provided by Inderscience

Citation: Tracking the spread of disease on social media (2020, April 2) retrieved 20 June 2024
from <https://techxplore.com/news/2020-04-tracking-disease-social-media.html>

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