



*Letters*

## **Global decision support dashboard of COVID-19**

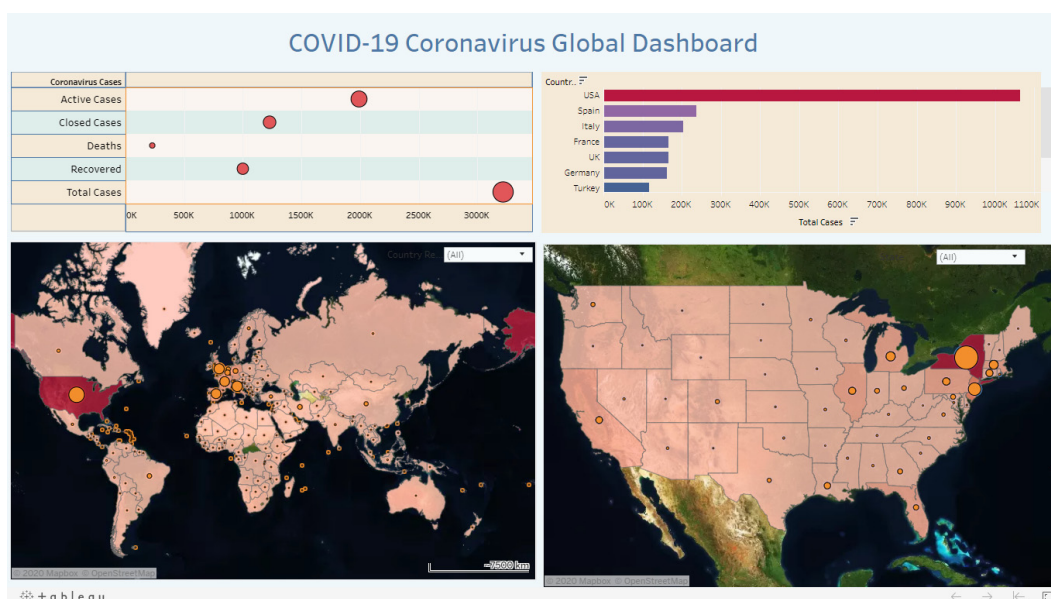
**Sushant K. Singh\***

Artificial Intelligence & Analytics/Healthcare and Life Sciences, Virtusa Corporation, New York City, NY, USA

\* **Correspondence:** Email: [sushantorama@gmail.com](mailto:sushantorama@gmail.com).

---

At the time of writing, the novel coronavirus (COVID-19) has affected over 3 million individuals in 210 countries and territories, from which more than 228,194 individuals have died [1,2]. The first case of COVID-19 was reported on January 10, 2020, in Wuhan, China [3,4]. In just three months, the deadly virus has spread from China to 210 countries [5]. Social isolation, state and country lockdowns, remote work, and unpreparedness to combat this pandemic have significantly affected each individual, society, economy, health sector, industry, and country [1,2,5]. Because the number of victims is increasing daily, an open-source-based decision-support dashboard would be handy for everyone to track COVID-19-related information and make informed decisions. In this regard, the Center for Systems Science and Engineering of Johns Hopkins University in Baltimore, Maryland, has developed a useful real-time dashboard [6]. The map displayed on this dashboard requires selecting an area to see the COVID-19 data, and the rest of the information is provided in tabular text format, which is unintuitive. Also, there is no option to download the dashboard; therefore, the work is not reproducible. Thus, a semi-real-time global dashboard is created using a community version of the business intelligence tool Tableau (version 2020.1). The panel provides the following information on a single screen through maps, graphs, and charts: (a) a comprehensive summary including total cases, total deaths, total recovered cases, active cases, and closed cases across the world; (b) country-level data including total cases, new cases, total deaths, new deaths, total recovered, active cases, serious and critical cases, and the death ratio; (c) the top ten countries most affected by COVID-19 and all case-related information for these countries; and (d) total cases and deaths in the United States (Figure 1).



**Figure 1.** Near realtime global dashboard of COVID-19 [7].

The maps and the graphs have tooltip options, and users can easily visualize the data after hovering over the areas of interest. The dashboard also provides filters to select the regions of interest at the global level and states at the U.S. level.

This dashboard can be viewed on any digital device, customized by the importance of the region. It can be downloaded directly as an image, PDF, PowerPoint, and other formats as required [8]. The download option provides flexibility to reproduce the work with little effort, and the data can be visually shown through presentations or publications. Currently, the United States is selected as the interest of the region. The United States has been declared to be the global epicenter of COVID-19 and has reached the highest total number of cases in the world. The data is refreshed every five hours and will continue collecting data until this outbreak is controlled. Anyone can explore and download the dashboard without a subscription from any region across the world.

### Conflict of interest

The author declares no conflict of interest.

### References

1. WHO, Coronavirus disease 2019 ( COVID-19): situation report, 100. 2020, World Health Organization. Available from: [https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200429-sitrep-100-covid-19.pdf?sfvrsn=bbfbf3d1\\_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200429-sitrep-100-covid-19.pdf?sfvrsn=bbfbf3d1_2).
2. Worldmeters. Coronavirus Cases. 2020 April 29, 2020. Available from: <https://www.worldometers.info/coronavirus/>.
3. Guo YR, Cao QD, Hong ZS, et al. (2020) The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak—an update on the status. *Mil Med Res* 7: 1–10.

4. Lu R, Zhao X, Li J, et al. (2020) Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. *Lancet* 395: 565–574.
5. Yang GZ, Nelson B J, Murphy RR, et al. (2020) Combating COVID-19—The role of robotics in managing public health and infectious diseases. *Sci Robot* 5: eabb5589.
6. Dong E, Du H, Gardner L (2020) An interactive web-based dashboard to track COVID-19 in real time. *Lancet Infect Dis*, pii: S1473-3099(20)30120-1.
7. Near Realtime Global Dashboard of COVID-19. Singh S, 2020. Available from: <https://public.tableau.com/profile/sushant.singh#!/vizhome/COVID-19CoronavirusGlobalDashboardRealtime/COVID-19CoronavirusGlobalDashboard?publish=yes> (accessed April 29, 2020)
8. Murray DG (2013) *Tableau your data!: fast and easy visual analysis with tableau software*, John Wiley & Sons.



AIMS Press

© 2020 the Author(s), licensee AIMS Press. This is an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>)