

Editorial

Special Issue on the COVID-19 Pandemic

The novel human coronavirus disease COVID-19 was initially reported in early 2019, leading to a global pandemic that is ongoing, and hopefully waning, in 2022. The virus has claimed millions of lives and affected all aspects of human life including health, economic, recreational, social, and educational [1–3]. Society has been challenged by evolving knowledge about the virus and its impact on humans, the value of restrictions put in place by well-meaning but inconsistent leaders, and rapid evolution of science leading to vaccines and treatments that are debated and not accepted by everyone. This special issue is dedicated to bringing to the forefront the best intelligent decision technologies that can impact our understanding and response to the COVID-19 pandemic.

In this special issue, we research ways that intelligent decision technologies can provide effective, efficient, ethical and systematic decision-making support for relevant stakeholders and decision makers in a pandemic crisis. We have assembled a set of papers that investigate a range of intelligent technologies. An overview paper presents a literature review of analytics intelligent decision technology systems. Some papers focus more explicitly on the way that decisions are made and the various groups that are part of a complex decision context such as a pandemic. One paper uses machine learning to extract knowledge from articles on coronavirus. Since COVID-19 is highly contagious and attacks the respiratory system, early diagnosis is essential to an effective treatment strategy. Some researchers develop machine learning techniques to improve diagnosis in medical imaging of lungs as an aid to the decision maker. Other researchers focus on predictions of

COVID-19's impacts on human health and on resources needed to manage the crisis using characteristics of countries, symptoms and biological functions.

Multiple types of intelligent methods are explored in pursuit of providing better insight to decision makers, and we believe that readers will be inspired to advance their own future research in related fields. In addition, the research represented in this special issue demonstrates the significant contribution that intelligent decision technologies can make to alleviating human suffering and aiding decision making.

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