



AI Technologies for Society in COVID-19 Pandemic

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The COVID-19 pandemic has changed our lives drastically. For researchers, it also changed research activities. Universities and laboratories are closed, hold research events such as conferences online, and so on. On the other hand, they had conducted research and development that responds to COVID-19 in many fields in artificial intelligence and computational social science.

In this special issue, we present three research on artificial intelligence in society in the COVID-19 pandemic. This research is a revised version of an article published in the Journal of the Japanese Society for Artificial Intelligence in July 2020.

“Image Processing for the Prevention of Infectious Diseases” [1] is a research of image processing technology, which has been developed remarkably in recent years. This paper describes the AI system that detects hand-washing time and mask-wearing based on video recorded by a webcam.

“Visualizing Social and Behavior Change due to the Outbreak of COVID-19 using Mobile Phone Location Data” [2] is research using big data on the fluid population. They introduce a system that calculates the rates of stay-home for residents by region using the difference between day-time and night-time populations.

“COVID-19 and Networks” [3] is a survey paper about network analysis. The paper explains how network science contributes to the fight against new coronas such as epidemic models or influence maximization, and so on. In addition, it introduces the network datasets and resources for COVID-19 research.

The three papers are all introductions to research carried out during the COVID-19 pandemic. The era of with and after coronas is continuing for some more time. We hope that this special issue will provide an opportunity for new research and development for the COVID-19 pandemic.

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