

Simulate the social distancing in the new normal

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In order to reduce the spread of COVID-19 since it broke out globally, the related studies have recommended maintaining a social distance of 1.5 meters, which avoids mass gatherings in order to reduce the spread of the epidemic by reducing contact between infected and uninfected persons. The implementation of relevant strategies not only affects the behavior pattern of the crowd in the open public space but also gives rise to the New Normal life pattern of the zero-contact economy. In addition, in the age of data, data acquisition, analysis, interpretation, and simulation can provide the assessment of epidemic spread in different situations according to different regional characteristics and population behavior patterns. In view of the above research requirements, this study firstly understands the characteristics of the research sample area through data analysis, then, it makes use of relevant characteristics to draw up different situation design, and uses the tool of flow simulation to present different situations. And they are also used to analyze the clustering behavior and dynamic lines of the population in the research sample area, so as to provide a reference for the strategy of reducing contact to reduce the spread of the epidemic.

This study takes "Ximen Ding" in Taipei city as the research sample area. First, it uses web crawlers to retrieve comments from social media sites in the study sample, namely, it refers to the number of times that a business facility is discussed on the Internet. Instead of using the positive and negative aspects of the comments as evaluation criteria, the discussion frequency is recorded and translated into the network share of voice of the region. And the potential population clusters in the research sample area are evaluated by thermal analysis of the spatial distribution of all commercial facilities in the field and the share of voice of its social media network. Finally, this study uses GAMA-Platform, a simulation analysis tool that has been widely used in recent years to simulate urban phenomena or predict the appearance of future cities. Through the agent-based analysis method, you can define the activity in each agent such as speed, born of location. etc it integrates the design and application of information visualization to present in the situation simulation. The crowd gathering places and open spaces tend to cause conflict points. And the study puts forward the reference for formulating spatial social distance related epidemic prevention strategies in the new epidemic situation in the future.

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