National | World | Local | Business | Technology | Science | Life | Covid-19 Live

LATEST NEWS   omputer model to reduce Covid infections and deaths   Road construction season open in Tasmania   Light to Lic

Science   15 SEP 2021 12:22 PM AEST   Share

Computer model to reduce Covid infections and deaths

A team of scientists from Nanyang Technological University, Singapore (NTU Singapore) has developed a predictive computer model that, when tested on real pandemic data, proposed strategies that would have reduced the rate of both COVID-19 infections and deaths by an average of 72 per cent, based on a sample from four countries.

The model, called NSGA-II, could be used to alert local governments in advance on possible surges in COVID-19 infections and mortalities, allowing them time to put forward relevant counter measures more rapidly.

The computer model achieved the result by recommending timely and country-specific advice on the optimal application and duration of COVID-19 interventions, such as home quarantines, social distancing measures, and personal protective measures that would help to thwart the negative impact of the pandemic.

The team also showed NSGA-II could make predictions on the daily increases of COVID-19 confirmed cases and deaths that were highly accurate, at a confidence level of 95 per cent, compared to the actual cases that took place in the four countries over the past year.

Harnessing the power of machine learning, the research team developed NSGA-II by inputting large amounts of data on COVID-19 mortalities and infections worldwide that is available for the whole of 2020, helping it learn the dynamics of the pandemic.

/Public Release. This material comes from the originating organization and may be of a point-in-time nature, edited for clarity, style and length. View in full here.

Donate with PayPal
Why?

Tags: covid-19, Impact, infections, learning, machine learning, Nanyang Technological University, pandemic, research, Scientists, Singapore, social distancing, university

You might also like

Drugs and explosives located at Reynella, South Australia

Cherrybrook man charged over sexual assault at Sydney International Airport

Packed with possibilities