



Dr Yaacob Ibrahim trying out the Ambiotherm, a virtual reality headset accessory developed by NUS that simulates ambient temperatures and wind conditions, at the innovation conference yesterday. With him was DBS Group chief executive Piyush Gupta (right) and a team from NUS. ST PHOTO: KUA CHEE SIONG

# \$150m boost for AI, in bid to solve ‘grand challenges’

**AI.SG initiative aims to address nationwide issues and help firms adopt artificial intelligence**

**Lester Hio**

Hospitals may be understaffed but imagine still having your own health assistant who can monitor and provide medical advice.

That may be possible with the use of artificial intelligence (AI).

For example, AI software can be used to make more accurate glucose measurements for diabetic patients, based on analyses of their medical histories.

To make the push in using technology to solve big nationwide problems, the National Research Foun-

dation (NRF) yesterday launched a programme to boost the use of AI in Singapore.

The NRF will invest up to \$150 million over five years in this new initiative, dubbed AI.SG.

Unlike other research programmes that focus on particular areas, the grants made available under AI.SG will be problem-driven and aimed at solving “grand challenges”, said its executive chairman, Professor Ho Teck Hua.

“The ultimate output will be solutions that solve these grand challenges, not just a research publication,” said Prof Ho, who is also deputy president of research and technology at the National University of Singapore (NUS).

He added that the actual problems to be solved will be announced before the year end, following consultations with lead users,

researchers and agencies.

Communications and Information Minister Yaacob Ibrahim, who announced the launch of AI.SG at a two-day innovation conference, said it will focus first on the fields of finance, city management solutions and healthcare.

“AI.SG will do three key things – first, address major challenges that affect society and industry; second, invest in deep capabilities to catch the next wave of scientific innovation; and finally, grow AI innovation and adoption in companies,” said Dr Yaacob.

Besides developing intelligent health assistants that can advise patients, AI.SG will look into transport issues. One example might be to find ways to reduce vehicle travel time by 10 per cent.

Prof Ho said this could be done by using AI in traffic lights to better

manage traffic flow.

AI.SG is a cross-government initiative comprising six agencies: the NRF, Smart Nation and Digital Government Office, Economic Development Board, Infocomm Media Development Authority, SGInnovate and Integrated Health Information Systems.

AI.SG will also work on smaller projects that can produce solutions within months. It will do this with Singapore-based research institutions, start-ups and businesses dealing with AI.

At the launch, Dr Yaacob also announced a partnership between the NRF, three local universities and the Agency for Science, Technology and Research (A\*Star) called the Singapore Data Science Consortium, which will focus on training businesses to use data science and analytics in their operations.

Companies can tap data science researchers from NUS, Nanyang Technological University, Singapore Management University and A\*Star.

The consortium will also work closely with AI.SG in AI research to develop more advanced AI tools, as such research is extremely data-intensive.

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## AI.SG chief also expert in behavioural sciences

The man behind Singapore’s push to apply artificial intelligence (AI) and data science to solve national challenges is not just a data scientist, but also a behavioural scientist.

Professor Ho Teck Hua, 55, executive chairman of the newly formed AI.SG, will oversee the programme’s mission to tackle large-scale challenges in finance, transport and healthcare through the use of AI. He will also lead the newly formed Singapore Data Science Consortium.

“I hope my background in behavioural and data sciences can help gather researchers from different disciplines and encourage them to share ideas, brainstorm solutions and, in turn, spark innovation,” said Prof Ho.

He is also the deputy president

(research and technology) and Tan Chin Tuan Centennial Professor at the National University of Singapore (NUS). He holds a doctorate in Decision Sciences from the Wharton School of the University of Pennsylvania, a Master of Arts in Decision Sciences from the same school, and a Master of Science in Computer and Information Sciences from NUS.

He spent over a decade at the University of California, Berkeley as a chaired professor with tenure. In 2015, he returned to Singapore to take up his current post. He was a recipient of the Returning Singaporean Scientists Scheme for a proposal to solve societal challenges using big data-driven decision sciences.

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