3 **New NTU institute**

The NTU Institute of Science and Technology for Humanity will study technology's impact on society and address issues like job replacement and data protection. It will bring together academics, researchers, and members of the Government to guide the development of technology for the betterment of humanity. **TOP OF THE NEWS A8**

New NTU institute to study tech's impact on society, address concerns

Tiffany Fumiko Tay

What does it mean to be human in the 21st century, and how does humanity prevent the rapid development of technology use and artificial intelligence (AI) from doing it more harm than good?

These were among the questions raised at the launch of a new institute to study technology's impact on society and address anxieties on issues such as job replacement and data protection, at Nanyang Technological University (NTU) yesterday.

The NTU Institute of Science and Technology for Humanity will bring together academics and researchers from diverse fields – such as robotics, linguistics, neuroscience and design – as well as members of government and industry to guide the development of technology for the betterment of humanity, rather than for its own sake.

The institute will begin by focusing on three areas: ethical implications of innovations; the governance of technology use and issues around leadership; and how technology is transforming the urban

At the launch of the NTU Institute of Science and Technology for Humanity (NISTH) yesterday were (from left) the University of Twente's Professor Vanessa Evers, who will join NTU on Aug 1 and be head of the new institute; NTU president Subra Suresh; Deputy Prime Minister Tharman Shanmugaratnam; and Mr Peter Ho, chairman of the NISTH International Advisory Board and senior adviser of the Centre for Strategic Futures. ST PHOTO: DESMOND WEE

landscape in Asia.

Deputy Prime Minister Tharman Shanmugaratnam said in a keynote address at the launch that while the benefits of technological innovation have been tremendous, more thought must be put into potential downsides.

"We have to think about the ethical implications of innovations in science and technology upfront, and build it into the design of our solutions," he told an audience of about 900 faculty members, students and guests.

"Too much of the focus on ethics

FOCUS ON ETHICS EARLIER

> **Too much of the focus on ethics in technology today is a focus that happens after the event, after a problem has arisen.**
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> **DEPUTY PRIME MINISTER THARMAN SHANMUGARATNAM**

in technology today is a focus that happens after the event, after a problem has arisen," he said. He cited the example of a Chinese scientist who made headlines last November for having created the world's first genetically edited babies. The scientist, who was found later to have

acted illegally, had cited compliance with loosely defined US guidelines, said Mr Tharman, who is also Coordinating Minister for Economic and Social Policies.

This illustrates the importance of having clear guidelines, he added.

He also noted that two basic issues need to be addressed, both of which concern "the quality of our societies". One is the evolution of social relationships. Over centuries, these evolved based on proximity and regular interactions, at work and in the community. But in a tech-rich environment, these are giving way to relationships of fleeting encounters across large distances, he said. "That is life on the Internet."

The other troubling and more immediate issue is about the quality of democracies, he said.

Mr Tharman noted that technology has given rise to a new way in which information is being created and circulated. "The escalating and energetic circulation of information is already having an impact on the type and quality of democracies all over the world."

These issues address questions of what it means to be a human being

in the 21 century, which is the overarching theme of the new institute, he noted.

Mr Tharman said that ensuring a job-rich future, in which technology augments rather than replaces humans, will require job redesign and the inculcation of certain skills from a young age.

Coding, for example, is a "basic language of the future" that may be as important as the natural languages, he said. "The question then is how early do you start teaching children the basics of thinking in algorithmic terms and coding."

The new institute will be headed by Professor Vanessa Evers, renowned for her work in the field of socially intelligent computing and human-computer interaction.

A professor of computer science at the University of Twente in the Netherlands, she will join NTU on Aug 1. She said that the institute aims to "be the voice of the common person, the person who is afraid to lose his job or privacy", and to ensure all can reap the benefits of AI equally.

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