



Dr Mayer taking a joyride on the Schaeffler e-board, an electric skateboard that can be steered, accelerated and braked using only one hand. Meanwhile, Mr Andreas Schick, CEO Asia-Pacific, Schaeffler, demonstrates an electric bicycle with a built-in automatic gearshift. ST PHOTO: LAU FOOK KONG

New lab aims to transport you to the future

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The time-travelling DeLorean may not be in the room but there are plenty of other gadgets that belong to the future.

For instance, there is the electric skateboard that warns its user about potential obstacles. And what about the electric car that you pedal, like a bicycle?

Some of these gadgets, from a new research lab, a collaboration between the Nanyang Technological University (NTU) and German automotive supplier Schaeffler, may

make their way to roads some day.

The Schaeffler Hub for Advanced Research (Share) at NTU is dedicated to studying various aspects of personal urban mobility and intelligent transportation systems.

These include studying the behaviour of personal mobility device (PMD) users and developing "smart units" that will help enhance the safety of PMDs and last-mile experience for their users.

The university will work with the relevant agencies to ensure devices, such as the electric skateboard, meet regulations here, said NTU chief of staff and research vice-pres-

ident, Professor Lam Khin Yong.

Comprising 10 to 15 researchers as well as 10 PhD students, the lab will receive \$5 million in funding over the next three years.

It will also tap an existing project between NTU and NXP Semiconductors to enable PMDs to communicate wirelessly with traffic infrastructure and other vehicles.

Data from the research can be used to decide on issues, such as if PMDs should have their own lanes, a question that could help in the Republic's car-lite push in the next decade, said Professor Yoon Soon Fatt, the chair of NTU's School of

Electric and Electronic Engineering, where the lab will be based.

Dr Marcel Mayer, Schaeffler's project leader for Share at NTU, said the lab's work will help in understanding how people commute in big cities. This is important, he noted, given that 60 per cent of the world's population is expected to live in cities by 2030.

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ST VIDEO: Dr Marcel Mayer demonstrates the electric skateboard.
<http://str.sg/47ek>