



Minister Ong Ye Kung examining a dummy as Associate Professor Erle Lim (in blue) demonstrates MediSIM, an augmented reality training tool. TNP PHOTO: **GAVIN FOO**

## Augmented reality, apps to help with medical training

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Medical students in Singapore will soon be able to see a patient's abdomen with simulated X-ray vision.

In about a year, they can use an augmented reality program that will enable them to see and feel the insides of an abdominal mannequin, and learn about diseases and symptoms.

Called MediSIM, the program allows the students to study the human anatomy without causing inconvenience and pain to real patients.

Users use a headset to examine the abdominal mannequin, which has interchangeable organs, and are able to see and feel the physical symptoms of the virtual patient.

"This is no substitute for real patients, but this can allow students to get some clinical experience, especially early on, without inconveniencing patients," said one of the creators of MediSIM, Associate Professor Erle Lim of Yong Loo Lin School of Medi-

cine at the National University of Singapore (NUS).

The program, which was developed with Carnegie Mellon University, piloted in Singapore this year. MediSIM is on show at the second National Conference on Technology-Enhanced Learning, hosted by NUS. The event features ways of incorporating technology in education.

Innovations include a software to help educators and students create augmented reality scenes and projects easily. The ConJAR software, which runs as a mobile app, allows users to design 3D augmented reality scenes without prior training.

For example, if a professor wants to teach about the brain, he can download a 3D image online and create a model that can be turned and shifted.

The conference features speakers from overseas, including Australia and the US, as well as student speakers from local universities.

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