

From 'anger control' game to smart windows

TWELVE projects including Dr Adams Kong's vein pattern recognition system, which allows for the identification of criminals based on the veins on their bodies, received up to \$250,000 each in the National Research Foundation's latest round of grants.

Seven are from the Nanyang Technological University (NTU), four from the National University of Singapore (NUS) and one from the Institute of Mental Health (IMH).

The grants are awarded twice a year to projects from tertiary institutions and medical centres.

Recipients are chosen by a panel of entrepreneurs, business leaders and venture capitalists.

Since 2008, 63 projects have received grants, including the latest recipients.

Projects awarded this time include:

■ An online game to help children and adolescents with anger problems

Users log on to a virtual world and play games that take them through real-life situations that often provoke young people, such as being stared at or being hit by a stray basketball.

IMH associate professor Daniel Fung, who is the project leader, said this could help anger-prone young people, most of whom do not seek help at clinics.

■ A super-capacitor that stores 100 times more energy than normal batteries

Super-capacitors store electric energy and charges, making them green energy sources. The NUS project may be used to give consumer devices such as iPhones a longer battery life.

Project leader Xie Xianning said they could also power electric vehicles in the future.

■ Windows which can switch between opaque and clear

These are smart windows which can change their opacity and colour at the flick of a switch. The technology can be adapted to block infra-red and ultraviolet rays from the sun as well.

Project leader Alfred Tok from NTU said the technology could also be used for sunglasses, military camouflage and next-generation electronic displays and televisions.



Dr Adams Kong's vein pattern recognition system processes digital photos to make veins on bodies more visible so they can be compared to criminal suspects' photos that are put through the same procedure. PHOTO: NANYANG TECHNOLOGICAL UNIVERSITY