

Right: Panasonic Security Solutions business division head Alvin Quek demonstrating the FacePRO facial recognition software.

Below: A Panasonic staff member showing how the latest smart cameras and built-in analytics can be used by retailers. PHOTOS: PANASONIC SYSTEM SOLUTIONS ASIA PACIFIC, KEVIN LIM



Face it! There's no escaping from this facial scanning tool

Panasonic and NUS team up to develop new software that can take mass attendance

Joy Pang

Fake attendance at work and in school looks set to be a thing of the past with a new facial recognition system Panasonic has developed with the National University of Singapore (NUS).

Called FacePRO, the system, when coupled with the Japanese electronic giant's i-Pro camera, can scan faces and match identities against a database of registered faces in seconds.

Launched last July, it can search up to 30,000 registered faces in real time.

The deep learning technology was developed with NUS to improve facial recognition performance by up to 500 per cent compared with conventional technologies, Panasonic said yesterday when it unveiled its use in an automatic attendance-taking system.

The system, which integrates facial recognition and analytics, can accurately and swiftly authenticate the presence of large groups of students or workers in a non-intrusive manner, be it in a lecture hall or at a conference or meeting.

Beside saving time, it also minimises human error and manipulation of attendance, said Panasonic.

The software can also detect and identify faces angled up to 45 degrees horizontally and 30 degrees vertically.

Said Mr Yoshinori Yamana, managing director of Panasonic System Solutions Asia Pacific: "Even though facial recognition technology is becoming more common globally, there are still endless possibilities for future applications that can transform our lifestyle."

The FacePRO software was pioneered in the Facial Recognition Gate at Tokyo International Airport in Haneda in 2017 to cut down on the arrival processing time for Japanese nationals. This was to prepare for an influx of about 40 million foreigners

90%

Accuracy rate when detecting faces partially hidden by sunglasses or face masks.

who will visit Japan during the 2020 Summer Olympics in Tokyo.

The technology analyses faces and sends only the best shot images to the server. This eliminates the need for extra bandwidth.

It has a 90 per cent accuracy rate when detecting faces partially hidden by sunglasses or face masks, and can match faces taken from up to 10-year-old passport images.

Panasonic also hopes to extend the use of the FacePRO technology in retail. With smart cameras and built-in analytics, retailers can customise their advertising to target a specific group. The smart camera can detect the gender and age range of a customer based on facial features, and the system can project digital ads suited to the individual.

Other than traditional surveillance capabilities, Panasonic's smart camera solutions also provide businesses with data analytics such as the number of customers in the store and data on which products were popular, alerting staff to real-time changes in shelf inventory to ensure stores remain sufficiently stocked.

Businesses using Panasonic self-payment kiosks can use the built-in facial recognition software to detect returning customers and retrieve their shopping history.

joy@sph.com.sg