Tech start-ups push to make China’s facial recognition systems part of daily life across Asia
China’s goal to become a global leader in artificial intelligence (AI) can be seen in the efforts of some of its leading start-ups in facial recognition technology to deploy their applications in overseas markets.

Innovative systems created by facial recognition specialists in the world’s second largest economy are already seeing increased demand in major countries across South-East Asia.

SenseTime Group, the world’s most valuable AI start-up, recently joined the likes of Megvii and Yitu Technology in making inroads in the region, which consists of 11 countries with a total population of 653.4 million, about 49% of which live in urban areas, according to the latest United Nations estimates.

SenseTime signed separate deals with Singapore Telecommunications (Singtel), Nanyang Technological University and the National Supercomputing Centre in Singapore to do advanced research and develop AI-based solutions in the country and the other member-economies of the Association of South-East Asian Nations (Asean), according to a statement from the start-up, which is known for providing AI-powered surveillance software for China’s police.

“As Singapore serves as SenseTime’s international hub, we’re committed to building an AI ecosystem with our local partners and servicing customers with leading AI technologies,” said Martin Huang, SenseTime’s managing director in the city state. “We look forward to promoting the development of AI in the Asean region.”

The overseas expansion initiative of SenseTime is the latest example of how China is moving ahead of the rest of the world in making facial recognition technology a part of people’s everyday lives.

China has made strides in facial recognition technology because of its large population and centralised identity databases. The technology, which uses biometric computer applications to automatically identify an individual from a database of digital images, is now being used extensively by public security authorities to spot suspected criminals and even jaywalkers.
Although Chinese citizens have raised concerns about privacy protection, China’s broader initiative to become a global leader in AI has prompted local governments and police departments across the country to embrace facial recognition technology as an important tool for public safety efforts.

Using sophisticated AI algorithms, a number of innovative Chinese tech start-ups have also teamed up with major businesses on the mainland to adopt facial recognition systems in the financial services, retail and travel environments.

The global facial recognition market is forecast to be worth US$6.5 billion by 2021, up from US$2.3 billion in 2016, according to the latest estimates from research company Technavio.

Founded at the Hong Kong Science Park in 2014 by Chinese University academics Tang Xiaowu and Xu Li, SenseTime has raised more than US$1.6bil (RM6.4bil) in funding in three years since it was established.
How facial recognition works

Your face is becoming the key to accessing your money, your devices and could mean the difference between freedom and imprisonment. It’s a feature that unlike fingerprints can be scanned at a distance, and it’s being used on a massive scale to electronically identify people as they walk past a camera. Here’s how it works, and how it fails.

In May, SenseTime raised US$620mil (RM2.5bil) to bolster its position as the world’s most valuable AI start-up, with a valuation of US$4.5bil (RM18bil).

The company, which has more than 400 customers and partners, had raised US$600mil (RM2.4bil) in the previous month from Alibaba Group Holding and other investors.

In October last year, SenseTime formed a strategic collaboration with mobile chip firm Qualcomm Technologies to extend its AI expertise into a broad range of devices.

While SenseTime has contributed to China’s initiative to build the world’s biggest facial recognition-enabled surveillance network, other mainland AI start-ups remain competitive in the technology and have made an aggressive push into international markets.

Megvii, the Beijing-based facial recognition start-up whose technology has been used by police departments to arrest fugitives, has appointed a distributor in Thailand and is in talks with commercial banks and building managers to deploy its facial recognition software.
In Malaysia, Megvii is holding exploratory talks with state governments and banks. It is also working on showing the feasibility of its technology – known as proof of concept in industry parlance – to qualify for tenders by airports across Southeast Asia looking to upgrade their surveillance capabilities.
Shanghai-based Yitu Technology already supplies the Auxiliary Force, part of the Royal Malaysia Police Cooperative, with body-mounted cameras that use facial recognition to promptly compare and match images captured by users with those stored in the police database.

The company's facial recognition software has also been used by banks to verify automated teller machine transactions, while its surveillance cameras are installed at borders to identify smugglers and illegal entrants.

Still, SenseTime’s own foray into South-East Asia has attracted a large services provider that could potentially help deploy its solutions to more projects. Singtel, the city state’s largest telecommunications network operator, also runs the second biggest telecoms company in Australia, Singtel Optus, and has a 39.5% stake in Indian telecoms provider Bharti Airtel.

“We look forward to collaborating with SenseTime to grow our AI capabilities and drive the adoption of AI technology across Asia,” said Arthur Lang, the chief executive of Singtel’s International group. He said Singtel’s regional footprint enables it to look at “many opportunities to leverage AI”, from retail to smart city projects. — South China Morning Post