

Getting Faced

China is quickly embracing facial recognition tech, for better and worse.

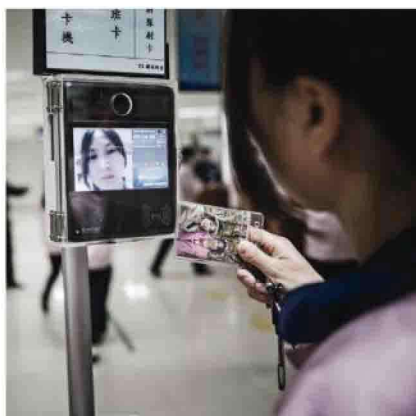
BY YUE WANG

Would you want to have your face tracked by ever-present cameras so others can know your identity and whereabouts? While the answer is likely to be no for many in the West, the scenario is becoming a reality in China.

Facial-recognition technology, a staple of *Minority Report*-style movies, is quickly inserting itself into the daily lives of more and more people in the country. Unfettered by privacy regulations, China's largest internet companies are scooping up hundreds of millions of photos from their online apps to teach computers to analyze facial features. These companies have identified potential revenue streams through advances in artificial intelligence, while catering to Beijing's interest in deploying the technology for enhanced surveillance.

For example, search giant Baidu showcased its facial-recognition technology at the company's first AI developer conference in Beijing. It is also using it to verify customer identities for insurance firm Taikang. Ant Financial, the payment affiliate of Chinese e-commerce giant Alibaba, now allows users to make transactions by scanning their faces. Today's Headlines, a popular local-news app, uses facial recognition to verify partner writers, according to Xie Yinan, a spokesperson for Beijing-based facial-recognition startup Megvii, which licenses its technology to news and entertainment platforms.

In some of these cases, the verification process requires users to tune in through live video. Computers can then analyze their facial movements and make cross-references with national-ID photographs to verify identities, Xie says. The technology can also distinguish still photos from real people, he said. Meanwhile, many hotels, schools and kindergartens are installing cameras to scan



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people's faces before allowing entry. Some colleges have even resorted to installing this technology to spot "ghost writers" trying to sit exams for other students. And one KFC in Beijing is scanning customers' faces to recommend menu items based on such factors as age, gender and mood.

"In China, facial-recognition technologies are as good as those developed in Western countries," says Wang Shengjin, a professor at the department of electronic engineering at China's prestigious Tsinghua University. "But we are far ahead when it comes to deploying it commercially."

The technology's biggest fan, however, is the Chinese government. In a bid to monitor citizens more closely, authorities are integrating facial recognition with the country's vast network of 176 million surveillance cameras; there are only 50 million in the U.S., according to consultancy IHS Markit.

Much like in the U.S., the authorities use facial-recognition technology to cross-reference surveillance footage, here using a huge data trove of national-ID photographs to catch criminals and terrorists. The technology has become so good that it can even match a person with photos taken ten years apart. There are also ways to enhance the quality of obscure shots. "It is similar to

what you see in the *Fast and Furious* movies, only with even higher accuracy," Megvii's Xie says, referring to a fictional system called God's Eye that can immediately locate anyone's whereabouts through surveillance cameras.

Other uses, however, would spook many in the West. As part of a national campaign to promote "civilized" behavior, regulators have deployed facial recognition to name and shame jaywalkers in dozens of Chinese cities. In Jinan, for example, face-reading cameras take videos of pedestrians crossing roads on a red light. Offenders' personal information, including names and home addresses, are then displayed on screens at the side of roads as a warning, according to the state-run Xinhua News Agency.

Under Chinese law, this doesn't constitute a breach of privacy. Although facial recognition has been around for years, the most relevant law regulating its use didn't go into effect until this past June, according to Ronald Cheng, a partner at international law firm O'Melveny. China's newly installed cybersecurity law has rules on collecting personal information, including biometric characters, for commercial use, but this doesn't apply to local governments, Cheng says.

Citizens can request deletion of personal information or seek remedies if companies are found to be in violation of the cybersecurity law, he says. But as the law is only a month old, enforcement remains to be seen.

Regardless, China is moving into a future where face-reading cameras will be everywhere. "China will remain ahead of Western countries in using facial recognition," said Leng Biao, an associate professor at the School of Computer Science & Engineering at China's Beihang University. "From a government strategy perspective, the technology will move much faster than in the U.S. and Europe." **F**