Chinese "gait-recognition" tech IDs people by how they walk

By Dake Kang The Associated Press

BEIJING — Chinese authorities have begun deploying a new surveillance tool: "gait-recognition" software that uses people's body shapes and how they walk to identify them, even when their faces are hidden from cameras.

Already used by police on the streets of Beijing and Shanghai, "gait recognition" is part of a push across China to develop artificial-intelligence and data-driven surveillance that is raising concern about how far the technology will go.

Huang Yongzhen, the CEO of Watrix, said its system can identify people from up to 165 feet away, even with their back turned or face covered. This can fill a gap in facial recognition, which needs close-up, high-resolution images of a person's face to work.

"You don't need people's cooperation for us to be able to recognize their identity," Huang said in an interview in his Beijing office. "Gait analysis can't be fooled by simply limping, walking with splayed feet, or hunching over, because we're analyzing all the features of an entire body."

Watrix announced that it had raised 100 million yuan (\$14.5 million) to accelerate the development and sale of its gait recognition technology, according to Chinese media reports.

Chinese police are using facial recognition to identify people in crowds and nab jaywalkers, and are developing an integrated national system of surveillance camera data. Not everyone is comfortable with gait recognition's use.

Security officials in China's far-western Professors from Osaka University have province of Xinjiang, a region whose worked with Japan's National Police



Muslim population is already subject to intense surveillance and control, have expressed interest in the software.

Shi Shusi, a Chinese columnist and commentator, says it's unsurprising that the technology is catching on in China faster than the rest of the world because of Beijing's emphasis on social control.

"Using biometric recognition to maintain social stability and manage society is an unstoppable trend," he said. "It's great business."

The technology isn't new. Scientists in Japan, the United Kingdom, and the U.S. Defense Information Systems Agency have been researching gait recognition for more than a decade, trying different ways to overcome skepticism that people could be recognized by the way they walk. Professors from Osaka University have worked with Japan's National Police Agency to use gait-recognition software on a pilot basis since 2013.

But few have tried to commercialize gait recognition. Israel-based FST Biometrics shut down earlier this year amid company infighting after encountering technical difficulties with its products, according to former advisory board member Gabriel Tal.

"It's more complex than other biometrics, computationally," said Mark Nixon, a leading expert on gait recognition at the University of Southampton in Britain. "It takes bigger computers to do gait because you need a sequence of images rather than a single image."

Watrix's software extracts a person's silhouette from video and analyzes the silhouette's movement to create a model of the way the person walks. It isn't capable of identifying people in real-time yet. **GAIT RECOGNITION.** Huang Yongzhen, CEO of Watrix, checks his smartphone while employees demonstrate the use of the firm's gait-recognition software at the company's offices in Beijing. The Chinese technology startup hopes to begin selling software that recognizes people by their body shape and how they walk, enabling identification when faces are hidden from cameras. Already used by police on the streets of Beijing and Shanghai, gait recognition is part of a major push to develop artificial-intelligence and data-driven surveillance across China, raising concern about how far the technology will go. (AP Photo/Mark Schiefelbein)

Users must upload video into the program, which takes about 10 minutes to search through an hour of video. It doesn't require special cameras — the software can use footage from surveillance cameras to analyze gait.

Huang, a former researcher, said he left academia to co-found Watrix in 2016 after seeing how promising the technology had become. The company was incubated by the Chinese Academy of Sciences. Though the software isn't as good as facial recognition, Huang said its 94-percent accuracy rate is good enough for commercial use.

He envisions gait recognition being used alongside face-scanning software.

Beyond surveillance, Huang says gait recognition can also be used to spot people in distress such as elderly individuals who have fallen down. Nixon believes the technology can make life safer and more convenient.

"People still don't recognize they can be recognized by their gait, whereas everybody knows you can be recognized by your face," Nixon said. "We believe you are totally unique in the way you walk."

Associated Press video producer Olivia Zhang contributed to this story.

Japan's minister of cybersecurity has never used computer

By Yuri Kageyama The Associated Press

OKYO — Japan's minister in charge of cybersecurity is in the spotlight for acknowledging he has never used a computer and making comments showing he has no idea what a USB port might be.

Ruling party lawmaker Yoshitaka Sakurada, also in charge of the 2020 Tokyo Olympics, was replying to questions from independent and opposition legislators.

"I give instructions to my aide and so I don't punch into a computer myself," he said. "But I am confident our work is flawless."

When asked about the power grid and malware, Sakurada said USB was "basically never used" in the utility systems, appearing to not know what it

Olympics, Sakurada's high-profile bungling is an embarrassment for Abe.

Sakurada, 68, a graduate of Meiji University, was first elected to parliament in 1996, representing Chiba prefecture, near Tokyo.

His favorite issues are pushing for Japan's economic prosperity and supporting its culture. "There is no genius that surpasses effort," is his favorite motto.

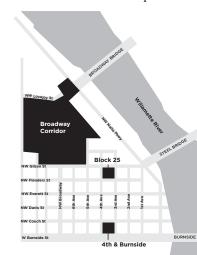
In factory after factory, Kim tries to grow N. Korea economy By Eric Talmadge

The Associated Press

ONSAN, North Korea (AP) — For North Korean factory managers, a visit by leader Kim Jong Un is the highest of honors and possibly the most stressful event imaginable. Dear Community -

More than a year ago, the city of Portland and Prosper Portland embarked on a once-in-a-generation opportunity to develop the 34-acre Broadway Corridor site in Northwest Portland. The location, size, and scale of this property present a rare chance to build in a way that puts people first, particularly those who traditionally have not benefited from past development projects.

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More recent development opportunities adjacent to the Broadway Corridor include the potential development of property at 4th and Burnside and at Block 25, bounded by NW 3rd, NW Glisan, NW 4th and NW Flanders. Again, the priority for these projects is people first, not buildings, and the creation of places where long term residents, people of color and people of all incomes will feel that you belong here and that this is "your" neighborhood.

As a Portlander, you have a stake in these neighborhood plans and developments. You have a right to participate in the jobs and economic prosperity generated.

In the coming weeks you have the chance to participate in the shaping of the

might be. pos

Lawmakers laughed incredulously at his replies, which were highlighted in Japanese media. Questioning and answers in parliament are also carried live on national TV.

Ministers in Japan almost always get parliamentary questions in advance. Often their answers are based on briefings from ministry bureaucrats. In Sakurada's exchange, bureaucrats were seen rushing over to give him sheets of paper with information.

Ministers are tapped by Prime Minister Shinzo Abe, and Sakurada was named to his position in the latest cabinet reshuffle.

Although the minister is not expected to have much hands-on responsibility in the handling of either cybersecurity or the The chief engineer at the Songdowon General Foodstuffs Factory had looked forward to the visit for nearly a decade. His factory makes baked goods and soft drinks sold around the country.

Kwon Yong Chol said Kim's visit was the biggest thing that could have happened to the factory's workers. "He ate our instant noodles. He said they were delicious."

Not all managers have been so fortunate.

Kim has embarked on dozens of such visits after promising to turn his attention from weapons development to the economy. Reflecting the gravity of his current mission, Kim has shown little patience for cadres who come up short.





On Wednesday, November 28, you are invited to the Broadway Corridor Open House at the Asian Health & Service Center in Lents Town Center, from 5-7:30pm. You'll be able to view and comment on three design concepts and share your ideas, questions and concerns. You can also participate in our online Open House at www.broadwaycorridorpdx.com/openhouse.

For the two properties in Old Town/Chinatown, Prosper Portland's goal is to select one or more developers for the two properties by the end of June 2019. We need the input of property owners, business owners, residents, and those with historical or cultural connections to the neighborhood to make sure these developments are successful in meeting Old Town/Chinatown's vision.

Prosper Portland will be holding community discussion groups with the Chinese and Japanese community, the Old Town/Chinatown Community Association, and the general public throughout the months of November and December to help identify community goals and benefits.

If you are interested in participating in focus groups, attending an open house or community meeting, or providing input on the Old Town/Chinatown projects, contact: Bernie Kerosky, Development & Investment Project Manager, (503) 823-3459, keroskyb@prosperportland.us, or Adrienne DeDona, Community Outreach Specialist, (503) 235-5881, adrienne@jla.us.com.

We are never done listening. We want to hear from you, your families, and your communities. Let your voice be heard.

Mayor Ted Wheeler & Kimberly Branam, Executive Director at Prosper Portland