

Facial Recognition Technology Just Took a Giant Leap Forward

ERock Christopher March 12, 2018



The latest advancements in facial recognition technology appear to be nothing short of promising.

Though relatively new, facial recognition technology continues to improve in leaps

and bounds. Needless to say, the future is bright for this technology.

([Newswire.net](#) -- March 12, 2018) -- AI and facial recognition are the new normal in China. You can scan your face to pay for things, unlock doors, and board planes. Crowds are scanned in public places and the videos are used to find criminals and identify terrorists.

In 2015, China's Ministry of Public Security announced a partnership with Shanghai-based security company, iSvision, to build the world's largest facial recognition database, cataloging each of its 1.3 billion citizens for identification in three seconds.

But the video surveillance system already in use all over China has limitations when it comes to keeping us safe. Mounted cameras are usually located at a high angle, making it difficult to get a photo of a full face. The faces of people passing cameras may be in shadow, turned away, or covered by hats, high collars, or people around them. Crowds make great cover for people with evil intent.

Vision analytics company [CrowdOptic](#) recently teamed up with [NEC Australia](#) to change that. Together, they will add new dimensions to our eyes in the sky.

The new technology, which recently deployed in Australia, enhances identification by providing a more complete picture collected from various sources, including fixed security cameras, body cams, drones, and smart glasses.

By capturing different angles in real time, the software eliminates the possibility of mistaken identity between people who look alike. It ensures that a person who commits a crime - or a person on a watch list - is captured on video and not hidden by something as commonplace as a hat.

Consider the tens of thousands of people who pass through Beijing Railway Station each day. Many of them may have similar hairstyles, similar build, even similar clothes.

While it's easy for us to distinguish people we know, the human eye may not be able to pick an ordinary-looking person out of a crowd. We focus on the overall picture, and not the tiny details that make each individual unique, especially when something is happening. That's one reason eyewitness testimony is often unreliable.

The latest generation of biometric facial recognition software is far more discerning. Sophisticated 3D modeling ensures far superior accuracy compared to early facial recognition.

This level of improvement in facial recognition technology is a game-changer, comparable to going from fuzzy analog television to razor-sharp 4K HD. There is little comparison when it comes to detail.

One of the primary issues with single-capture facial recognition is lighting. It's nearly impossible to get a complete face without obscuring shadows using a camera mounted on a wall above eye-level. And, of course, an eye level camera would be useless in a crowd situation. Misidentification under such circumstances is common.

Systems equipped with this new technology will be able to pick a suspect out of a crowd and use other available cameras to triangulate his exact position, all while streaming the scene in real time. In other words, it's going to be really hard to get away, and there will be no question of identity.

This is not CrowdOptic's first major innovation in the field of security. In 2016, the company partnered with Suspect Technologies and SICdrone to manufacture drones equipped with live-streaming capabilities and data analytics, paired with facial recognition and obfuscation technology for first responder and public safety industries.

CrowdOptic CEO Jon Fisher entered the field with 47 global patents and additional 21 patents pending, according to the company. IT was a natural extension of their previous work to build on and enhance the existing technology.

As the world gets more crowded and more dangerous as a result, technology steps in to deliver solutions. In turn, the new solutions raise new questions about privacy issues and other legal concerns. Mobility is the key to smart city technology. The goal of integrating different technologies is to expand the reach and capability of first responders, law enforcement, and the military to help them respond faster.

But when this technology spreads and becomes available to reporters and everyday citizens, will the world be safer? Will being aware that every move is potentially captured on video by cameras that can identify and locate us make violent crime a thing of the past?

While China's new database coupled with the new innovations in facial recognition would be incredibly powerful public security tool, [the concept is not without controversy](#). Potential breaches of individual privacy are a valid concern. Detractors warn that more access to personal data carries a higher risk of data leakage.

Only time will tell where this goes, but one thing is obvious: With China at the forefront of facial recognition deployment, the time is coming where we will not be able to jaywalk without being identified, and perhaps fined, without ever coming in contact with a policeman.

Source: <http://newswire.net/newsroom/blog-post/00100612-crowdoptic-facial-recognition-technology.html>