

NEC facial recognition helps NT Police solve crime and increase public safety

Northern Territory Police Force

Customer

- Northern Territory Police Force

Industry

- Public Safety

Challenges

- Finding a leading edge forensic facial recognition technology to fight crime and keep communities safer

Solution

- NEC's world leading facial biometrics technology
- NEC Australia's Melbourne-based R&D team to develop applications meet specific NT Police operational requirements

Results

- The NEC system now helps NT Police identify hundreds of individuals in support of its enforcement and safety responsibilities
- Rapidly searches of photo database to match against any still, CCTV or video image
- Investigation times reducing as suspects quickly identified or ruled out soon after a crime has been committed
- Face recognition has advantages over fingerprint identification as images can be captured automatically and from a distance

Hardware/Applications

- NEC's NeoFace Reveal solution



The Customer

The Northern Territory Police Force is a modern, well-respected force with more than 1200 sworn Police, Auxiliaries and Aboriginal Community Police Officers. Many members now serve in specialist sections such as Major/Organised Crime, Forensic Services, Territory Response Group, Marine and Fisheries Enforcement Section, Airwing, and the Police, Fire and Emergency Services College.

The Challenges

The Northern Territory Police Force sought a leading edge forensic facial recognition technology to fight crime and keep communities safer.

The Solution

As a leader in adopting innovative technologies to enhance public safety, the Northern Territory Government deployed NEC's NeoFace Reveal solution - an internationally acknowledged facial recognition technology - to help not only the Police but also Fire and Emergency Services.

In choosing NEC's facial recognition technology, the government selected the vendor that achieved the highest performance evaluation in the tests performed by the U.S. National Institute of Standards and Technology (NIST).

NEC Australia's in-country Research and Development team, based in Melbourne, is working closely with NT Police to develop applications, using NEC's world leading facial biometrics technology, that meet the specific NT Police operational requirements.

Like fingerprinting, facial recognition is a form of identification that allows a computer to quickly match similar faces based on facial features.

The facial recognition system plays a key role in NT Police's investment in mobile technology across handheld devices and image capture equipment. There are currently 190 cameras in the network monitored by the police department's CCTV unit, in addition to the mobile CCTV units that can be moved on-demand to 'hot spots' and major public events. The government has also issued 1,330 tablets to police officers and installed satellite communications in 51 police vehicles in remote locations.

More than 100,000 images have been copied into the system database from existing Police information holdings.

Footage or images captured on CCTV are submitted to NT Police's facial recognition team who can load it into the facial recognition system for analysis and comparison with existing images in the database.

Results

The NEC system allows personnel in NT Police to rapidly search through their database of photos and match against any image or CCTV footage, as well as photos taken from body-worn camera videos, drones and phone images. The chief advantage of face recognition over fingerprint identification is that face images can be captured from a distance without touching the person being identified.

Northern Territory Police is now able to identify hundreds of individuals in support of its enforcement and safety responsibilities by enhancing the value of CCTV footage for investigation purposes.

During the initial trial in early 2015, police used the system to successfully identify around 300 individuals from photos and CCTV footage. It helped police solve crimes and prevent threats to safety including examples such as a man who stole goods from a commercial premises at Casuarina Village; a man who stole fishing equipment from a commercial premises at Berrimah; a man who unlawfully entered Charles Darwin University; and an unconscious man admitted to the Royal Darwin Hospital after having been seriously assaulted.

It has the potential to assist police in their identification of missing persons. And for those in the community who suffer from Alzheimer's or other similar health issues, it can help in getting them to the care they need.

“The technology is helping reduce investigation times by enabling investigators to quickly identify or rule out suspects soon after a crime has been committed,”

- Peter Chandler, Northern Territory Police Minister