

Facial Recognition in Policing

Build safer and smarter communities, with the world's most trusted facial recognition solution



necsws.com

What is NeoFace?

NeoFace® is NEC's high performance, highly scalable facial recognition algorithm, providing fast and accurate results for the most demanding real-time or post-event facial recognition use cases.

It's designed to find a needle in a haystack, reducing a problem down to a much smaller review process. Built upon 40 years experience and world leading AI, it's highly tolerant of ageing, angles, headwear and environmental factors such as lighting.

It performs consistently regardless of age, ethnicity and gender by combining the best feature-matching and AI technologies, It's built-in safeguards support privacy and proportionate use, with auditing and reporting as well as automatic and manual data retention tools.

Why use Facial Recognition?

✓Keeping the public safe

By locating dangerous or vulnerable people in a fraction of the time, facial recognition software can reduce the chance of further offences and help to keep the public safe.

CReduces the risk to officers

Facial recognition software can help identify known violent offenders, by matching against custody records.

✓Focuses resources effectively

Facial recognition can speed up response times and cut significant amounts of manual work from investigations, which your force can reallocate to other investigations.

What are the different types of Facial recognition?

Retrospective Facial Recognition

Retrospective facial recognition is used to identify individuals post events from images or videos. By submitting an image or video into the system, it is matched against all subject images in the watchlist where a set of candidates are returned in order of highest similarity score to lowest for human adjudication.

Live Facial Recognition

Identify wanted or vulnerable individuals in realtime with live facial recognition. By connecting our facial recognition solution to a camera, you can identify vulnerable individuals as quickly as possible to give them the help they need and arrest wanted individuals before they commit further crimes.

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Missing or vulnerable individuals **Border Security** and Contactless Travel

Wanted Individuals

Operator Initiated Facial Recognition

Use our facial recognition solution through a mobile phone to identify individuals on the go. Simply use the facial recognition mobile app to take a picture of an individual to see if you can identify them. This could be the victim of a car accident, an individual for serious or violent crimes or to check an individual has been reported missing or is known to have mental disabilities.







Image





Custody Suite



NEC Orchestrating a brighter world

Retrospective Facial Recognition



Images

Whether it's an image of an individual considered highly dangerous in an investigation, reopening the cold case of an unidentified individual or the search of a vulnerable person, retrospective facial recognition identifies the individual/s in an image and compares it against your watchlists.



Video

Like with images, retrospective facial recognition can also go through large quantities of video footage post event, identifying individuals in the footage by comparing them against your watchlists.

Use cases of Retrospective Facial Recognition

Using retrospective facial recognition can save your force significant time and resources in the following investigations:

- Cold Case Identification
- Missing or vulnerable individuals
 Wanted Individual
- Human Trafficking
- County Lines
- Serious organised crime

How can it help your force?

\bigcirc It speeds up investigations by identifying people in minutes, not weeks

It locates or identifies individuals against watchlists significantly faster than manual review; potentially saving weeks of investigation time that can be reallocated to working on other cases.

✓ It offers a great return on investment

Our retrospective solution helps you look for individuals who may have already been captured in custody photos, video or CCTV. This is different from our live solution, which helps to prevent harm by matching faces in real time.

It can add value in a range of areas, like identifying or locating missing people, dangerous offenders or victims, even reopening cold cases to identify unidentified individuals.

✓ It's proven in UK policing

It's been chosen by six UK forces to support faster investigations, safer custody processes and more. Since being deployed with South Wales Police it has been highly successful, and is now used in

partnership with Gwent Police.







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Live Facial Recognition

Missing or vulnerable individuals

When a person or a vulnerable individual is reported missing they can be added to a watchlist. By temporarily deploying live facial recognition in regions which cover the areas where the individual may be, the individual can be identified and located quickly at a low cost.

How it can help your force:

- This approach to locating missing or vulnerable individuals is a very quick way to ensure they are located at speed so they are not harmed in any way.
- Very low cost in resources, rather than deploying multiple search units where each can only cover one location at a time.

Custody Suite

Enable live facial recognition in custody suites to identify individuals being brought in that have a previous history. This notifies officers if the individual has been previously violent towards staff or if they are providing a false identity.

How it can help your force:

- Identify an arrested individual when they enter the custody site to warn officers if the individual has a history of being violent towards staff so extra measures can be placed.
- LFR can identify individuals based on previous custody records and if they are providing false names or information at the custody desk, the officer can be made aware of this in realtime.

Wanted Individuals

Wanted individuals by the police or courts can be added to a watchlist. By deploying live facial recognition in regions where they are expected to be seen they can be identified and questioned.

How it can help your force:

- Individuals wanted for serious or violent crimes can be arrested before they commit any further crimes, increasing public safety.
- Rather than spending resources trying to locate one individual using standard manual procedure, you can identify and locate them and others with low cost.

Border Security and Contactless Travel

Deploy LFR at the borders for quick contactless passenger onboarding and protecting the border against wanted individuals.

How it can help your force:

- Speed up check in with contactless travel by using Face Recognition against the pre enrolled image provided by the passenger at the airport.
- Pre check enrolled passengers for security by running their image against wanted databases.
- Run LFR with CCTV cameras at the airport to idenitify individuals based on your watchlist.









Use our facial recognition solution through a mobile phone to identify individuals on the go. Simply use the facial recognition mobile app to take a picture of an individual to Identify them.

Examples of how this can be used are:

- Identifying the victim of a car accident
- Identifying an individual for a violent crime
- Identifying a reported missing person
- Identifying a vulnerable individual and assign additional care or support as needed

Why NeoFace?

It's independently verified as the world's most accurate

 Our NeoFace algorithm has topped National Institute of Standards and Technology (NIST) Rankings for over 10 years in accuracy and equitability. It works effectively even in challenging conditions, e.g. poor lighting and masks. So you can be confident officers are using the best possible solution.

It was built with public trust in mind

- It's got built-in privacy features to enable you to comply with UK's laws and regulations.
- We're guided by NEC's long-established principles around biometrics and AI which encourages ethical, proportionate and targeted use.
- We work closely with many UK forces to advance the use of facial recognition in the UK.

It's continually updated to deliver the best possible performance

- It enjoys constant investment from NEC's global biometrics team and benefits from realworld deployment across 57 countries.
- Its UK deployment is guided by our policing and public safety experts who've developed and deployed a range of solutions
- Feedback from forces is incorporated into future versions of NeoFace solutions to continuously improve and expand on its capabilities.

So now you've found out a little more about NEC Facial Recognition we'd love to hear from you....







Book a demo with us

Visit our website: necsws.com

We look forward to meeting you and seeing how we can help you and your team.





Email us at: hello@necsws.com



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