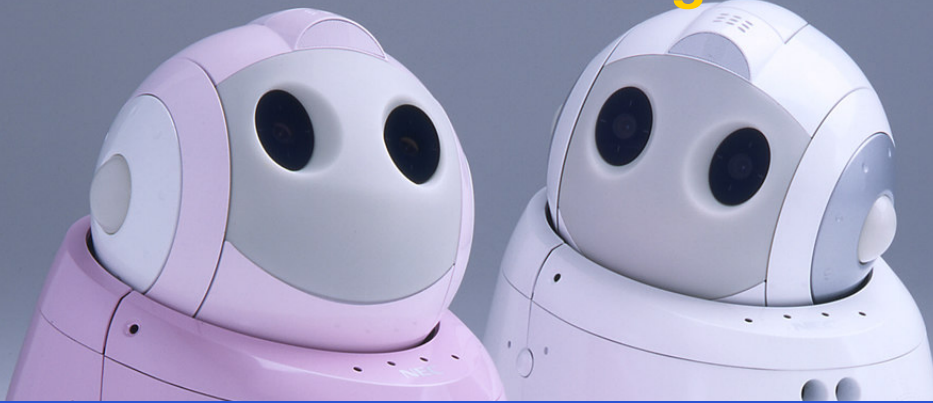


NeoFace Facial Recognition



Intelligent Security and Surveillance

Facial Recognition - has great advantages over other biometrics. It enables faces to be recorded and archived at a distance, act as a crime deterrent, and help identify a person immediately or at a later date. The contact-free non-obtrusive procedure makes for a more acceptable and easier integrated identification solution using existing cameras.

Biometric face recognition has achieved a high profile, not only in security applications. It has also become increasingly important in registering and verifying individuals.

2D face recognition results from 15 years of experience. NEC has developed biometric solutions for more than 30 years and has installed a huge number of AFIS systems worldwide, making it one of the most renowned biometric specialists.

Web-based Fast Mobile
Non-obtrusive Live Wireless



- National ID Documents
- Border Control Management
- Access to Sensitive Zones or Networks
- Airport Security Management
- Criminology Work
- Prison Management
- Intelligence Gathering



NeoFace - Facial Recognition

Intelligent Video Solutions

NEC - a leader in biometrics

NEC Corporation of Tokyo is one of the world's largest manufacturers of IT and telecom technology; its solutions for IT, networks and electronic components are in the forefront of modern technology. NEC offers individual service packages, including 24/7 hotline support, on-site service and regular product upgrades.

Law Enforcement

Our law enforcement applications enable mugshot browsing, searching, uploading, matching, filtering and mind-mapping via web-based front-ends.

Access can be from anywhere, based on authorisation, and logged. Eye witness line-ups can be created in a fraction of the time compared to traditional methods. Intelligence gathering from live cameras can be displayed and searched through in seconds.

Matching can be performed quickly by uploading local files or via remote devices such as mobile phones or wireless video servers.

Mugshot Capturing

Facial recognition results are improved by the best possible images. Using face detection and the control of Pan Tilt Zoom (PTZ) cameras, consistent quality checked mugshots can be captured to meet Best Practice Recommendations.

NEC Facial Recognition Integration

The NeoFace SDK is a 2D FR engine which is available to selected NEC companies worldwide, it provides the following key features which allows our Application Development team to integrate into existing processes and provide solutions which are simple and easy to use.

- Face detection algorithms, modes and search depths suitable for different environments such as fast detection, high accuracy, infrared cameras
- Biometric feature data extraction
NEW: feature data types for accuracy of low resolution, high resolution and aging
- Eye, face and head position details
- Head position score and confidence data
- A configurable detection area
- Preview image with mirroring option
- Detection of up to 100 faces per image/frame
- Region matching (eye region, eyes and nose region or full face)
- 1:1 Verification (confidence score based result)
- 1:n Identification (confidence score based result)
- DirectShow Video or Still image input i.e. JPG, BMP
- Image resolution of up to 2,147,483,647h x 2,147,483,647v
- Matching speed of up to 1,000,000 faces per second

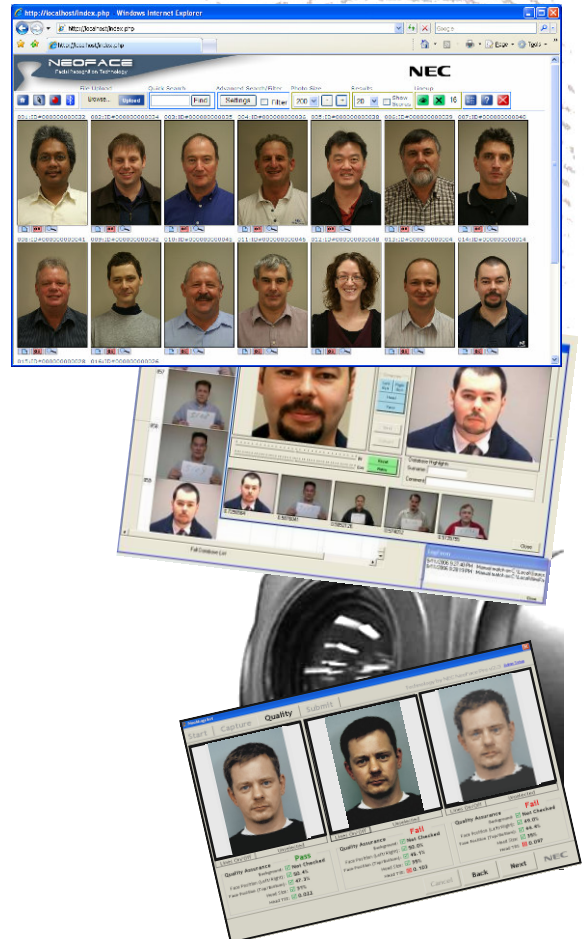
Detection and/or Matching Server Requirements

- Windows 2000/XP*
- Minimum requirements: 512MB RAM, 100MB HDD, Pentium 4 Processor 2GHz
**access to server can be via non-Windows platforms, mobile device, wireless, web access etc*

Reference Sites:

- Hong Kong Immigration System, since 2004, 1:1.5m matching.
Received IT Excellence Award
- Sanitarium NZ, Weetbix All Black Promotion
June-December 2007, www.weetbix.co.nz

"the world's largest biometric databases are implemented by NEC"



NeoFace Features

- GLVQ-based multiple matching FR system
- Combines extraction of eyes and recognition of facial features
- Reliable verification through classification with neural networks
- Short processing time
- High recognition rates
- Face recognition regardless of vantage point and facial changes (glasses, beard, expression)
- Optimal results through ARBM technology (Adaptive Regional Blend Matching)
- Extraction of similar facial areas
- Identification and authentication based on individual facial features
- Can be flexibly adapted to existing IT systems
- Can be integrated into many types of video monitoring systems
- 1:N comparison and identification
- Integrates into NEC's automatic fingerprint recognition system (AFIS)
- Supports diverse graphic and video formats as well as live camera feeds

MORE INFORMATION:

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