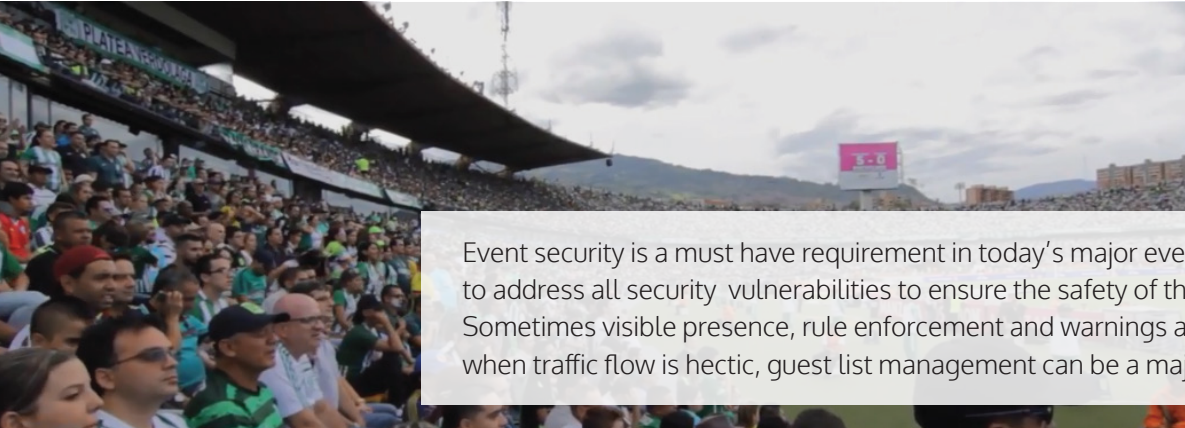# Facial Recognition for Major Event Venues

Intelligent Surveillance Solutions

Generate real-time alerts using highly accurate facial recognition technology

Event security is a must have requirement in today's major event environment that we need to address all security vulnerabilities to ensure the safety of the property and patrons. Sometimes visible presence, rule enforcement and warnings aren't enough. At busy times, when traffic flow is hectic, guest list management can be a major challenge.

ABT Security Systems implements NEC NeoFace®, which is the fastest and most accurate face recognition software in the market. Features include real-time video surveillance, off-line video face search and high volume photo face search. It can be easily integrated with your existing security systems.

Understanding of the special security needs in major event venues

- Security threats are a growing concern to all businesses. The Major Events Venue environment is no exception, in fact the threat is amplified.
- Public Safety is of paramount concern.
- In November 2009, COAG SOM stated in their paper "NATIONAL GUIDELINES for the PROTECTION of PLACES of MASS GATHERING from TERRORISM" that

  "Places of mass gathering not only present terrorists with potential opportunities for mass casualties, symbolism and high impact media coverage, they pose a broad range of security challenges for their owners and operators. The National Counter-Terrorism Committee (NCTC) noted that places of mass gathering have been specifically identified by religious and political extremists as attractive targets."

Upgrade your existing surveillance systems into the most accurate face recognition solution

ABT's Facial Recognition solution is specifically designed to integrate with existing surveillance systems and match against a 'watch list' of individuals. When the system identifies an individual of interest from the 'watch list,' it raises an alert, so that appropriate actions can be taken rapidly.

Independent testing* confirms that our facial recognition technology by NEC provides the fastest, most accurate matching capability and is the most resistant to variants in aging, race and pose angle.

*National Institute of Standards and Technology(NIST)

> " *Technology that has now been installed and used during football matches at Atanasio Girardot Stadium has helped in a very positive way.*
>
> ***Gustavo Villegas***
> ***Security Secretary of Medellin***

More than a security system, ABT Facial Recognition tracks subjects' behaviour through the monitored area. It identifies:

- Criminal or Persons of Interest
- Excluded, barred, suspended, suspicious, undesirable, banned persons as they enter the Venue, or monitored locations within the Venue
- Inappropriate (eg age)

- Members/Guests on a RSA list
- VIP Members
- Guest demographics (age, gender, etc.)
- Directors and Staff
- Contractors, Suppliers
- Suspicious, undesirable

NEC NeoFace® Face Recognition

- ■ **FASTEST**
- ■ **MOST ACCURATE**
- ■ **BEST WITH LOW QUALITY IMAGES**
- ■ **VERY HIGH TOLERANCE TO SITUATIONAL VARIABLES**

ABT Facial Recognition is a web-based with an easy-to-use user interface It is unobtrusive and requires no operator interaction. The application can be easily customised and integrated into existing surveillance operational systems.

With specific application to a major event venue environment, when the system identifies an individual of interest from the 'watch list,' it provides instant COVERT recognition and alerting of targeted guests at multiple pinch points entering the premises and/or restricted venue areas.

Video surveillance

HOW IT WORKS

1. CAPTURE

The application takes in real time video streams from surveillance cameras, CCTV or archived video footage at a rate of up to 30 frames per second.

2. ASSESS

The individual frames of video are each assessed, faces are detected and then each one analysed to determine its unique facial signature.

3. MATCH

The software then undertakes a matching exercise against a watch-list database which includes enrolled images of individuals.

4. REACT

Real-time alerts or messages can be configured to be sent if there is a positive match against a database image or on a negative match where an unknown face is captured in a secure area.
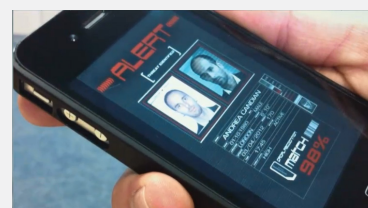
Cloud Based Facial Recognition by ABT Security

World-class Cloud hosting managed services facilities using IBM equipment

With ABT fully managed cloud hosting service, customers have the option to share costs with other users if they desire, further reducing initial costs and providing an entry level system for smaller organisations.

The benefits of the new 'Cloud based service':

- Sharing infrastructure costs with other similar organisations if desired, including the ability to share banned persons information with other organisations
- Fully independent managed services system operating within the Cloud environment
- Full systems redundancy
- 99.99% uptime guarantee
- Automated backup as part of the service
- All software upgrades service packs available for the life of the contract
- No requirement for major expansion of your existing IT infrastructure or staff
- Faster & easier installation and commissioning of your system

[MATCH]

IT'S ALL ABOUT THE FACE!

Benefit

- REDUCED CORPORATE RISK
- IMPROVED PUBLIC SAFETY
- ENHANCED MEMBER EXPERIENCE
- DRIVE INCREASED REVENUE/REDUCE COSTS

At a glance:

- Real-time video surveillance against watch lists
- Generates instant alerts to reduce security threats
- Independently evaluated as the most accurate face recognition solution available
- Highly resilient to varying environmental conditions
- Highly scalable for large facilities, systems and traffic
- Easy integration into existing operational & security processes
- Flexible licensing model
- Does not capture personal details
- Unobtrusive and requires no operator interaction
- High sample set and penetration rate
- Web based thin client easy to deploy
- Highly scalable and extendable
- Easy integration with existing business processes

NEC's NeoFace® face recognition solution is the fastest and most accurate solution available, as measured in independent tests.

- NEC's Video Facial Recognition Technology Ranks 1st in NIST Testing 2017 *
- NEC NeoFace® ranked 1st in 4 independent tests; 8 years running
- NEC has improved the most, leading further than other vendors
- NEC remains the most accurate since 2009 (MBGC 2009, MBE 2011, FRVT 2013, FIVE 2017)
- NEC is the fastest with the highest number of searches /second (3.1 million+ searches/sec)

ASIAL MEMBER
AUSTRALIAN SECURITY INDUSTRY ASSOCIATION LIMITED

NIST

BIOMETRICS INSTITUTE

INTELLIGENT SURVEILLANCE SOLUTIONS FOR MEGA EVENTS

Atanasio Girardot Stadium

> *Today at the stadium we can accommodate fans and club supporters of both the local team and the visiting team without any violent incidents. Thanks to use of facial recognition used at the time of admission of every person who is inside the stadium, and also used in the stands , we can have greater situational awareness of what is happening in each one of the stands. It's important to mention that Medellin Stadium has no barrier between the audience and the stage where the show develops thanks to technology we've implemented.*
>
> **Gustavo Villegas**
> **Security Secretary of Medellin**

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