WINBOURNE CONSULTING, LLC™

August 2020 Newsletter

Winbourne Consulting offers a full range of public safety services, including strategic planning, systems integration, specifications development, solution acquisition, and implementation project management and quality assurance.

Our Areas of Expertise encompass

## Facial Recognition—What Is It and What is the Debate?

As the debate regarding police reform takes place across the country, the use of facial recognition technology is becoming a key topic. Facial recognition technology is one of the more controversial law enforcement technologies under discussion by policy makers, law enforcement, and political activists throughout the United States. Facial recognition has been used successfully by federal state and local law enforcement agencies to assist in investigations related to human traffic and drug smuggling as well as to stop terrorists' attacks.

This article provides context to this discussion by briefing describing the technology and its use in law enforcement, and summarizing the discussion and actions undertaken by the federal, state, and local governments on the use of facial recognition technology.

First, what is facial recognition technology as it applies to Public Safety? The International Association of Police Chiefs (IACP) defines facial recognition as the following: "…Facial recognition is a software application capable of potentially identifying or verifying the identity of a person by analyzing patterns based on a person's facial feature locations and contours and comparing them to those features in other photographs. "

IACP also states: "What Facial Recognition is NOT: The result of facial recognition analysis is NOT a positive identification of an individual. In the law enforcement investigations context, facial recognition is a tool that potentially develops an investigative lead. Once the potential lead has been generated, human intervention is required to determine if the person in a photograph is actually the person whose identity is in question."

Facial Recognition—The Technology

Corporate marketing of facial recognition software to law enforcement agencies has occurred for over 20 years. Facial recognition technology is capable of identifying or verifying a person from a digital photo or video through the use of a variety of techniques, including Artificial Intelligence (AI). In general, the software compares selected facial features from a given image with faces contained within a database. In the process, the software attempts to identify a person's unique facial features, texture, and shape to photos in the database, such as mug shot database, to identify matches.
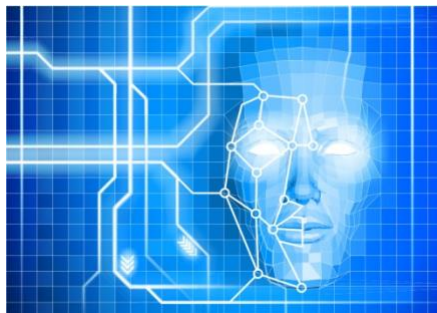
Besides Law Enforcement—Who Uses it?

Besides law enforcement, a range of organizations currently use facial recognition products. These organizations include airports, banks, casinos, public buildings, schools and subway systems. Thirty-seven state Departments of Motor Vehicle agencies use facial recognition to assist in identifying fraud by persons applying for or renewing driver's licenses. Consumers use facial recognition to unlock smartphones and tag friends in photos on social media. Other examples include trucking firms that are testing the technology to see if it

can help recognize fatigue in truck drivers. In addition, these companies are using apps to make fuel payments by permitting drivers to use facial recognition to record and authorize transactions.

Tests by U.S. National Institute of Science and Technology (NIST)

NIST conducted comparison testing of various facial recognition products in 2010, 2014 and 2018. NIST published the results in a report entitled NIST Interagency Report (NISTIR) 8238, Ongoing Facial Recognition Vendor Test (FRVT). The testing determined how well a developer's product could match a person's photo with a different one of the same person stored in a large database. This type of testing known as "one-to-many" search is often used when someone is applying for a visa or driver's license under a name different from his or her own. NIST test mug shot databases and "wild" photos from video.

NIST used a database of 18 million photos from more than 8 million people for the tests. The database did not include photos taken from social media, video surveillance or the public Internet. The 2018 tests, according to the NIST report, showed a marked increase in accuracy from similar tests conducted in 2014. In 2018, the products in general averaged a 0.2% failure rate as compared to 2014's 4% failure rate of correctly identifying the person in the photo or video from the test database.

Some of the 99 firms participating in the NIST evaluation include Idemia, Intel, Microsoft, Panasonic, SenseTime, Vigilant Solutions, CyberLink, NEC, and Paravision. Missing from the NIST testing were some firms that sell or have sold facial recognition products to law enforcement such as Amazon and IBM. In mid-2020, IBM, Amazon and Microsoft banned the sale of their facial recognition technology to law enforcement agencies. In fact, Microsoft has advocated for regulating the use of the technology by law enforcement. IBM's CEO announced in June 2020 that the firm will abandon this product line.

The NIST report indicates that most of the facial recognition algorithms/products exhibit "demographic differentials". The testing found that the various products' level of accuracy in correctly identifying the correct image degraded with a person's age, gender or race.

The Debate

The nationwide debate over police reform has brought the discussion on law enforcement's use of facial recognition technology to the forefront. A combination of concerns that include civil liberties, privacy issues, and the deficiencies related to accurately identifying women, seniors and minorities have crystalized the debate. Additionally, there is a lack of any national or state policy on its use. In addition, there are other related issues about the use of the technology in Public Safety. These include federal law enforcement agencies, including Immigration Customs Enforcement (ICE), Customs and Border Protection (CBP), the Transportation Security Administration (TSA), FBI, and the Secret Service use of state DMV databases although there is no congressional or state legislature authorization for the use of these state data bases. In reaction to this, many state legislatures are discussing setting policy guiding the use of the technology by law enforcement.

Over the past several months, congressional committees have initiated hearings on the use of facial recognition scans of driver's license databases by the U.S. Citizenship and Immigration Services (USCIS) (formerly Immigration and Naturalization Service (INS)). The House Homeland Security Committee is discussing possible guidelines for its use.

California has banned the use of facial recognition technology by law enforcement for the next three years. The Governor's order banned biometric surveillance technology, starting January 2020, to include body cameras as well as taking body camera footage and running it through facial recognition software later. However, police are not banned from using the technology on other cameras, and federal law enforcement could potentially use the software while operating in California. In addition, the California legislature is currently considering a bill that could expand the state's use of facial recognition technology, including for law enforcement purposes.

Other states such as Ohio and Massachusetts are debating its use and how to set state policy. Several states, including Oregon and New Hampshire already have laws in place banning police from using facial recognition in body cameras. Cities including San Francisco and Oakland in California, as well as Somerville, and Boston in Massachusetts have prohibited the use of facial recognition software in body worn cameras.

In Virginia, the legislature is considering convening a working group of relevant agencies, law enforcement, private industry, and academics to study the proliferation and implementation of facial recognition and artificial intelligence to make recommendations to the General Assembly.

In Ohio, the state government has appropriated $21.4 million to revamp its facial-recognition software next year. In addition, a state facial-recognition task force has recommended limiting the use of facial-recognition database to officials at the state Bureau of Criminal Investigation (BCI) and allowing the FBI and other federal agencies to request ask BCI to conduct photo searches on their behalf.

How We Can Assist

The discussions surrounding the use of facial recognition software is very similar to the discussions revolving around the use of body-worn cameras. Colorado's approach to establishing state-wide guidelines was to create a working group that would submit recommended policies to govern the use of body-worn cameras and the video captured by the devices. That working group comprised of a wide cross section of stakehoders, to include representatives of law enforcement, victim's rights, civil rights, prosecutors and defense, and individuals. Winbourne Consulting facilitated this working group to successfully prepare recommendations for the legislature.

Winbourne Consulting is experienced in not only facilitating these critical issues working groups but has assisted various agencies in the development of policy and guidelines related to these types of issues as well as the implementation of these programs. For additional information, please contact us at info@w-llc.com.

Winbourne Happenings

August 26, 2020 PRESS RELEASE

Ho Chi Minh City, Vietnam – The U.S. Trade and Development Agency announced today it has provided grant funding for technical assistance to fundamentally transform the ways Ho Chi Minh City manages its daily operations through advanced data analytics.

"Ho Chi Minh City has an ambitious smart cities agenda, and USTDA is an ideal partner to support its goals," said Todd Abrajano, USTDA Chief Operating Officer, Head of Agency. "Our partnership will help the City deploy cutting-edge ICT technologies and advanced data analytics that innovative U.S. companies are ready to supply."

USTDA's funding will help the City develop implementation plans for an Intelligent Operations Center, a smart cities priority that will aggregate real-time urban data onto an intuitive dashboard platform that can be leveraged by local leaders. Through the use of these smart technologies and the application of advanced data analytics, Ho Chi Minh City can enhance service delivery to its rapidly growing population and advance new economic development. **Virginia-based Winbourne Consulting, LLC, will execute the assistance on behalf of USTDA's grantee, Ho Chi Minh City's Department of Information and Communications.**

The complete Presse release can be viewed at: https://ustda.gov/ustda-ho-chi-minh-city-to-partner-on-smart-cities-project/

The City of Virginia Beach has announced the successful launch of its modernized citizen contact and service request Customer Relationship Management program. **The City partnered with Winbourne Consulting to document its business practices and workflows, and execute a successful vendor acquisition strategy.**
https://www.prnewswire.com/news-releases/virginia-beach-modernizes-311-operations-partnering-with-incapsulate-301110262.html

Public Safety News

New York City investigating 911 Issues After Recent Tropical Storm
Tropical Storm Isaias, which knocked out power for tens of thousands of city households Aug. 4, was also too much for the city's 911 Emergency dispatch system and its 311 non-emergency information line.

Interested in reading the entire article?, visit:
https://thechiefleader.com/news/news_of_the_week/council-to-probe-911-systems-problems-during-major-storm/article_08d0b128-e099-11ea-8c3d-0b0422b5efb2.html

Industry Events

NENA events are where the 9-1-1 community comes together to learn, grow, connect, and discover. In September, we're excited to bring you NENA Ignite – a brand-new way to gain skills and knowledge to do your job better, overcome the challenges you face today, and prepare for the road ahead.

NENA Ignite is a free-to-attend virtual conference and expo that delivers all of the great educational and social benefits you've come to expect from NENA, including:

NENA Ignite Sessions
Dozens of sessions available live or on-demand so you never have to miss out on a second of our industry-best training.

NENA Ignite Networking
Networking events and special interactive features designed to help you make the right connections with your peers and industry experts.

NENA Ignite Opportunities
Opportunities to experience the latest innovations that are transforming emergency response.

Don't miss your chance to be a part of this first-of-its-kind online event! Register today for NENA Ignite!

For additional info visit: https://nenaignite.onlineeventpro.freeman.com/

Welcome to IACP 2020

Given the global impact of COVID-19, the IACP has decided to move IACP 2020 from an in-person meeting to an online training event and expo in the fall of 2020!

In making this decision, the IACP considered feedback from members and conference participants, state and local guidance on large gatherings, budgetary and travel restrictions placed on police agencies, and guidance from the Centers for Disease Control and Prevention and the World Health Organization. This decision was made for the safety of our attendees and their communities.

While the details are still being finalized, here are just a few of the things you will be able to do at the IACP 2020 Virtual Training Event and Expo:

- Expand your knowledge with access to more than **175 educational workshops** on critical topics to the policing profession.
- Access all the educational workshops and presentations for **12 months** on IACP's virtual meeting platform.
- Hear from an impressive array of **experts, police leaders, and inspirational keynote speakers** during IACP 2020 general sessions.
- Visit IACP 2020's **virtual exhibit hall** to meet with vendors and sponsors to discover and discuss solutions to the challenges facing your agency.
- **Interact and network** with presenters and fellow participants online.

For additional info visit: https://www.theiacpconference.org/

Articles of Interest

AF Looks To Facial Recognition To Secure Facilities

The Air Force's AFWERX innovation arm is investing in real-time facial recognition to secure base perimeters and enhance situational awareness for Air Force security staff.

Announced earlier this month, AFWERX awarded two Phase II Small Business Innovation Research (SBIR) contracts to SAFR from RealNetworks to adapt its SAFR facial-recognition platform for use by a Security Forces Squadron and an intelligence, surveillance and reconnaissance (ISR) wing.

The central challenge for both projects is using a single platform that can analyze video from multiple devices -- drones, body-worn cameras and fixed surveillance cameras -- and determine that a facial image belongs to a live person, as opposed to a photograph or video of someone.

To read the full article visit:
https://gcn.com/articles/2020/08/26/afwerx-facial-recognition-base-security.aspx

MissionCritical COMMUNICATIONS | RadioResource INTERNATIONAL

NG 9-1-1 Coalition Forms to Advocate for Funding Legislation

The Public Safety Next Generation 9-1-1 Coalition, comprised of stakeholders from every discipline within the public-safety community including the fire service, emergency medical service, law enforcement and 9-1-1 professionals, is committed to advancing legislation that enables a nationwide upgrade to next generation 9-1-1 (NG 9-1-1). The coalition has united behind legislative principles that will address the needs and concerns of public safety.

The full story can be viewed at:
https://www.rrmediagroup.com/News/NewsDetails/NewsID/20013

The National Public Safety Technology Council (NPSTC) Announced The Publication Of Three New Reports That Deal With Issues Of Importance To All Public-Safety Agencies

These reports assess the status of consoles that support mission-critical push-to-talk (MCPTT), the future state of public-safety broadband for emergency medical services (EMS) and communications centers, and a comprehensive overview of public-safety internet of things (IoT) issues and considerations. NPSTC also released an update to its COVID-19 Operations Checklist designed for public-safety agencies and communications centers.

To read the full article visit:
https://www.rrmediagroup.com/News/NewsDetails/NewsID/20005

URGENT COMMUNICATIONS

Axon Launches Respond Platform With Cloud-Based CAD, Integration Support

Axon launched Respond, a cloud-based, real-time operations platform that marks the company's entry into the computer-aided-dispatch (CAD) arena and is designed to help agencies leverage information from a various connected devices to enhance response efforts, according to a company official.

To read the complete article visit: https://urgentcomm.com/2020/08/26/axon-launches-respond-platform-with-cloud-based-cad-integration-support/

**We Are Interested in Your Thoughts on the Above Topics.
To share them with us, please:**

Email us at: **info@w-llc.com**
Or
Twitter us at https://twitter.com/winbournellc

For more information about our services and solutions, visit our website at:
www.winbourneconsulting.com