

# **BrainFingerprinting**

# BRAIN FINGERPRINTING IN NATIONAL SECURITY

An indispensable solution that safeguards the interest of nations against the risks of an insecure world.

The diversity in national security challenges ranges from lone wolf hackers to transnational terrorist organizations to rogue nations with nuclear weapons. In today's volatile world of dynamic threats, Brain Fingerprinting plays a dynamic role in addressing the right needs of law enforcement across numerous security verticals.

#### CHALLENGES IN NATIONAL SECURITY

Gain the sophisticated protection required in today's world by taking security capabilities into the future.

National security constitutes the safekeeping of a nation as a whole, with its great priorities being the protection of its civilians from threat such as transnational crime, terrorism, porous borders, and nuclear proliferation. Given the magnitude and evolving nature of threat, security technologies must provide easy integration at a national level, one that can successfully address the web of challenges across all areas in law enforcement.

Various operations are comprised under the broader umbrella of 'national security,' namely border security, human and drug trafficking, and cyber security. Though each threat is considered fundamentally different with diverse approaches to mitigating them, they are heavily interconnected with complex overlapping consortium of networks unconstrained by borders.

Drug trafficking activities in one region may be easily funneling money to fund militant and terrorist operations in another discreet part of the world. Similarly, porous borders can spur a myriad of other criminal enterprises such as homicides, gangrelated offenses, terrorist operations, money laundering.

A central capability that all law enforcement and national security authorities share is the ability to definitively identify and thwart criminal suspects in a timely manner. An agency's failure to possess this simple, yet vital, capacity can result in consequences that undermine the rule of law, including missed opportunities to implicate suspects or the unwitting release of perpetrators.

# National Security

#### **BRAIN FINGERPRINTING SOLUTION**

Delivers an unparalleled level of innovation and value through its remarkable applications.

Taking advantage of great scientific leaps in neuroscience and cognitive psychophysiology, Brain Fingerprinting uses memory-related recognition brain patterns to equip law enforcement personnel with a powerful intelligence collection solution. Brain Fingerprinting is best positioned to enhance existing intelligence collection disciplines with the provision of a knowledge-based method of criminal identification.

Brain Fingerprinting is the crucial missing link between forensic and biometric technologies. No other technology currently exists that determines through reliable, objective, and scientific means whether a person has specific knowledge stored in the brain with over 99% accuracy. The system matches information stored in the memory bank of the suspect with information from the crime scene, valuably aiding law enforcement officials with the ability to distinguish between an innocent suspect and perpetrator. It is equally capable of matching information related to the planning stages of a criminal activities directly from a suspect's memory. Brain Fingerprinting is a powerful specific screening tool that identifies perpetrators before the act is carried out.

By using the brain as the sole subject of analysis, the common errors of false positives and false negatives are by default, absent. The system is built with practicality and accuracy in mind, designed to eliminate all countermeasures that are constantly arising for many security technologies today. Brain Fingerprinting is the closest technology that calibrates results well-above 99% that detects what critical intelligence the suspect is concealing. The automated approach ensures efficient use of agency resources, while providing excellent performance with zero processing errors. The resulting impact of a solution that aids investigation and intelligence collection disciplines is an expedited and improved judicial process leading to an increase in solved cases.

More than fifteen years of research and development have been dedicated to perfect the reliability and accuracy of its unique applications, its intuitive interface, and its customizable features of the system. Introducing Brain Fingerprinting, a cognitive and psychophysiological forensic tool in the security market, Brainwave Science has not only introduced a remarkably innovative technology, but also a new world of opportunities.

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# National Security

#### **KEY FEATURES**

| Accuracy                     | 99.9%                        |
|------------------------------|------------------------------|
| Reliability                  | High                         |
|                              | 85-90% of civil and criminal |
| Applicability                | cases                        |
| Counter Measures             | Zero                         |
| False Negatives              | Zero                         |
| False Positives              | Zero                         |
| Language Translation         | Available in all languages   |
| Results Calibration          |                              |
| Time                         | Instant                      |
| Portable                     | Yes                          |
| <b>General Customization</b> | Available                    |
| Cost-effective               | Yes                          |
| Field Tests Conducted        | FBI, CIA, U.S NAVY           |
| Admissible in U.S            |                              |
| Courts                       | Yes                          |

### **ADVANTAGES**

Brain Fingerprinting is an advanced investigative solution that facilitates the dispensing of justice through rapid and accurate identification of criminal suspects using specific brainwave responses.

The solution offers law enforcement a transformative proactive experience in generating leads of national security-related cases and cross-verifying suspects' testimonies:

- Accurately and safely screens suspects using an infallible witness—the human brain—to stop terrorists, transnational criminals, and wanted individuals before violence or crime can occur
- Empowers national security agencies and other law enforcement personnel in interrogation and investigation in corroborating suspects' testimonies and cross-verifying information on suspects
- Delivers results that are of the highest levels of accuracy and reliability
- Upholds the moral integrity and privacy of the suspect
- Ensures rapid testing time and calibration of results thus increasing crime clearance rates in multifold
- Meets the highest standards of costeffectiveness

# **BrainFingerprinting**

#### **HOW IT WORKS**



# Subject Preparation



The first step is to correctly Place the wireless Headset, which uses sensors (electrode) to collect the brain responses from the scalp and muscle movements.

## Launch Application

A series of crime or event specific, relevant and irrelevant stimulus in the form of words, phrases, or pictures are flashed on a computer screen.





## Collect Brain Responses

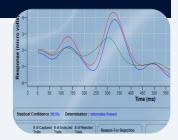


Collect the Brain responses for each words, phrases, or pictures in the form of EEG signals.

## Analyze the Result

The collected brain responses to the stimuli are analyzed with the patented techniques and scientific algorithms to determine whether the information under test is present or absent.





### The Statistical Confidence of the result is over 99% accurate

Brain Fingerprinting offers a unique and nearly flawless technology that nations can leverage to serve and protect innocent civilians. Being able to tell if a suspect has knowledge of terrorist activities without a lengthy and costly investigation is a valuable solution for law enforcement. For national security, Brain Fingerprinting holds the key to tapping into a suspect's mind and reading invisible clues. With the use of Brain Fingerprinting technology, nations can detect concealed information stored within the brains of wanted criminals and terrorists.