



BrainFingerprinting

Border Security

BRAIN FINGERPRINTING IN BORDER SECURITY

Brain Fingerprinting harnesses information stored in the brain to protect borders from unlawful infiltration.

By bringing a security solution embedded in psychophysiological science for Border Security agencies, Brainwave Science has not only introduced a new technology, but also a new world of possibilities. Airports, train stations, other transportation outlets, and unpatrolled border crossings such as ports and undefined land routes are prime locations for catching terrorists and wanted individuals. The existing biometric devices and visa processing methods can help to the extent of verifying a person, but they cannot find the missing link between a person's identity and concealed criminal information. The sheer volume of travelers and migrants poses a security challenge to be able to effectively vet each person with the level of detail it demands—until now. Specific screening tests with Brain Fingerprinting empower border protection departments with the agency to vet whether a suspect is concealing privileged information.

BORDER SECURITY CHALLENGES

Multidimensional challenges and increasing criminal threats are a result of porous borders. Countries face a wide array of threats at their borders, from terrorists who may have weapons of mass destruction to transnational organized crime such as trafficking, money laundering or counterfeiting, to unauthorized migrants intending to illegally live and work in a specific country.

Infrastructure-based security measures such as the erection of walls, wire fences on the walls, surveillance cameras, drones, balloon systems and sensors are useful to protect external borders, but are exorbitantly costly and time-consuming to build and sustain. Physical infrastructures and surveillance measures cannot minimize risk without leveraging all-source information and intelligence available on those entering and exiting borders. A holistic and integrated approach is essential to deter, prevent, detect, and respond to complex threat networks.

For many countries, the primary gap in securing both internal and external borders is the ability to objectively screen a person using a knowledge-based form of identification. A law enforcement agency's failure to possess this simple, yet crucial, capability can result in an influx of threatening goods such as weapons of mass destruction, illegal drugs, counterfeit products and threat actors such as terrorists, transnational criminals, and unauthorized migrants.

BRAIN FINGERPRINTING SOLUTION

Brain Fingerprinting is designed to offer a powerful specific screening solution for the detection of concealed information of suspected individuals. Specific screening tests through Brain Fingerprinting are uniquely suited for agencies looking to enhance existing intelligence collection disciplines such as human intelligence, signals intelligence, imagery intelligence, and open-source intelligence. The solution offers an advanced, knowledge-based method of criminal identification, best caters to agencies that have a desire to maximize intelligence capabilities.

A fundamental problem for Border Security is to quickly, accurately, objectively, and cost-effectively corroborate testimonies of suspected individuals. Conventional techniques of interrogation and interviews cannot reveal more than what an individual chooses to reveal. In most cases, evidence is limited to what informants or other intelligence networks have provided. In most cases, these warnings are not supported with sufficient intelligence to justify reason for suspicion or further investigation.

Border security personnel can overcome these difficulties with the help of advanced solutions. Brain Fingerprinting measures brain patterns called the P300 MERMER to detect whether information under test is present or absent in a suspect's brain. The human brain reacts involuntarily, hence countermeasures, false positives and false negatives take no effect. The ability to conduct relevant and timely collection of intelligence is key in deterring criminal activities.

The unique intelligence discipline that Brain Fingerprinting offers can help reveal hidden links and connections, which no other technology can provide. The high-value security solution empowers investigators in identifying which person is dangerous and to what degree. Only when an accurate identification of threat is made, can appropriate measures take place to thwart, deter, and mitigate its risks. Brain Fingerprinting and its infallible science supporting it are at the threshold of revolutionizing intelligence disciplines and specific screening methods so prevalent to security today.

KEY FEATURES

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

ADVANTAGES

Brain Fingerprinting helps organizations fill the critical gap in identifying suspects using cognitive-psychophysiology.

It provides border security capabilities never available before:

- 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 border 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 cost-effectiveness

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.



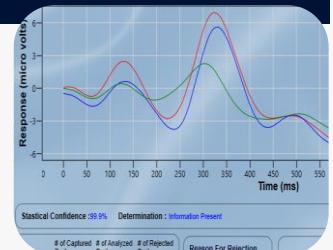
Collect Brain Responses



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

In border security, immigration, and customs, there are many available biomarkers such as fingerprints and retinal scans that can detect whether a particular individual is the same person as the person represented on his/her identification papers. What these biomarkers do not detect is whether or not this person is a threat to national security – a bomb/IED maker, a trained terrorist, a terrorist financier, a member of a specific terrorist cell, etc. This information is stored in the individual's brain and can be exhumed by utilization of Brain Fingerprinting.