



Frequently Asked Questions

Q: Could you tell me about ZeroEyes?

A: ZeroEyes is on a mission to stop gun-related violence in the United States. It offers an affordable end-to-end security solution, from threat detection to situational awareness, focused on proactively identifying guns before shots are fired and providing actionable intelligence to on-site staff and first responders. ZeroEyes is a proactive AI-based visual gun detection platform with the expert verification of experienced military and law enforcement veterans to deliver extremely accurate threat alerts and actionable intelligence to schools, businesses, and government offices. They pioneered this field and are the market leaders.

Q: When was the company established? How did it come about?

A: ZeroEyes was established in 2018 by a team of military veterans and elite technologists who, after seeing tragic school shootings like Sandy Hook and Parkland, were compelled to develop a solution to proactively mitigate mass shooting incidents. The idea came from its CEO, Mike Lahiff, who noticed the hundreds of cameras present in his daughter's school. Security personnel said that the cameras are not monitored and are only used after-the-fact to assess situations that have already happened, such as vandalism, fights, etc. Mike saw a unique opportunity to utilize existing cameras and layer artificial intelligence on top of them to detect illegally brandished guns and proactively address potential shootings.

Also, ZeroEyes is owned and operated in the United States, and has a strong practice of hiring and supporting military veterans and former law enforcement. Their code was 100% created in the U.S. and has never been touched by foreign entities.

Q: So how does it work?

A: ZeroEyes is a proactive visual gun detection and situational awareness software platform based on computer vision and advanced machine learning AI. It is layered on top of our existing digital security cameras. The technology is designed to identify illegally brandished guns and notify the ZeroEyes Operation Centers (ZOCs) that are staffed 24/7/365 for human verification. Once these experts verify that a gun has been correctly identified in real time, they dispatch alerts and provide situational awareness and actionable intelligence, including visual description, gun type and last known

location of the shooter to our staff and local law enforcement as fast as 3 to 5 seconds from detection.

This information is invaluable to first responders, who must act quickly with as much information as possible about a potential active shooter. A common issue we see today when active shooter incidents occur is that first responders lack the situational awareness necessary to locate the shooter, contain the threat, and prevent further loss of life. In most active shooter events, there are more than a hundred 911 calls made with contradictory reports, creating significant confusion (a 'fog of war') and making it impossible to gauge the true nature of the threat. In a recent active shooter training session, ZeroEyes' technology reduced officer response time by nearly two-thirds. Their goal is to dramatically reduce response time and save lives.

Q: Could you tell me more about the technology?

A: ZeroEyes is the most comprehensive and superior gun detection technology in the market. The company built its technology stack entirely themselves in the US. Its proactive AI-based visual gun detection and situational awareness platform was developed using hundreds of thousands of proprietary images and videos, and layers advanced machine learning over existing digital security cameras. The way the company describes its AI detection is that if a human was looking at a security camera and could detect a gun, then ZeroEyes would be able to pick up the same gun. Once the AI detects a potential gun, the image is flagged to its in-house operations center staffed entirely by military veterans and former law enforcement officers, where the staff assesses the frame and determines if it is a positive threat.

The ZOC is the industry's only operational center to be staffed entirely in-house and primarily by military and law enforcement veterans, often those who served in special forces units. The company is proud to have an operations center that it runs and controls with no outsourcing, providing its customers with the confidence that the best people are on the job.

The company's technology is in no way intended to be a replacement for humans, but the reality is that there aren't enough people in law enforcement or security to cover the 100 million security cameras currently deployed in the US alone.

No one can do a better job of vetting ZeroEyes' capabilities than the Department of Homeland Security. ZeroEyes is the only video analytics company in the US to receive the DHS' SAFETY Act designation. The process of receiving this designation required over two years of pressure testing by the DHS to ensure that its technology is sound, reliable and delivers what is promised: to detect visibly illegally brandished guns and

dispatch alerts to local law enforcement in as fast as 3 to 5 seconds from detection. The U.S. Department of Defense also trusts the technology to protect military bases and other facilities.

Q: How does ZeroEyes address privacy concerns?

A: ZeroEyes is object detection software that identifies guns, not people. The company is purely focused on identifying guns and providing situational awareness to safety personnel and local law enforcement. Its algorithms look for guns, not faces or body types. Until a gun is identified, the monitoring screens in the ZOC stay absolutely blank; ZeroEyes' team does not see a live feed from any cameras. Further, its platform does not store personal or biometric data or conduct any kind of facial recognition, so there is no risk of bias based on skin color or other personal characteristics.

Q: ZeroEyes can only detect the brandishing of a gun? Isn't that too late to stop the shooting?

A: ZeroEyes pioneered the field of AI-based visual gun detection after finding through research that, in the majority of mass shootings, the shooter reveals their gun well ahead of the incident. For example, in the Parkland shooting, the shooter went into the stairwell and sat there for minutes with his gun fully visible, getting mentally prepared. In the Aurora 'Batman' movie shooting, the shooter got suited up in the parking lot beforehand. The company sees these scenarios time and time again.

There is no requirement for the gun to be visible for some significant period of time in order to be identified by ZeroEyes. Once the technology detects a brandished gun in real-time, the ZeroEyes staff in the ZOC verifies and dispatches an alert to local authorities as fast as 3 to 5 seconds from the moment of detection.

Q: So ZeroEyes is focused on first responders arriving sooner? They can't prevent these events, but they mitigate them?

A: Correct. There is no possible way of preventing every shooting. ZeroEyes' goal is simply to save lives, and the company believes every life saved is a success. By providing first responders and law enforcement with advance warning and situational awareness, the company gives them an advantage in these scenarios.

Q: How does ZeroEyes help reduce response times?

A: ZeroEyes helps in two ways:

First, the company reduces the time-to-verification significantly. Traditionally in an active shooter situation, a person hears or sees something suspicious but is not sure what it is. Then, when it becomes clear that there is a threat, they must react and attempt to protect themselves and others. After that, they must calmly collect themselves amidst

the chaos and contact law enforcement. In most active shooter events, there are over one hundred 911 calls being made with contradictory reports, creating significant confusion, a 'fog of war' and making it impossible to gauge the true nature of the threat. That's why ZeroEyes' technology is designed to identify the threat the second the gun is visible so that the company can dispatch alerts to on-site staff and first responders as fast as 3-5 seconds from detection.

Secondly, there is the first responder blindspot. Often, multiple people call the police with contradictory reports, making it extremely difficult for first responders to understand the true nature of the threat. Police then show up to a giant campus or other location completely blind, not knowing where the shooter is or what they look like. As they attempt to map the threat landscape, the shooter is still active. Police have been killed in the line of duty because of this issue. With ZeroEyes' software and human verification, the company is able to provide actionable intelligence such as the shooter's weapon type and last known location, giving law enforcement the situational awareness they need to apprehend the shooter more quickly.

Q: How are police provided with the situational awareness you're talking about?

A: The ZeroEyes operations center integrates with 911 and the operator relays the information from their team to law enforcement on-site, in real-time. The alerts must be provided quickly, decisively, and with a clear and calm voice. Farming out this responsibility is absolutely not an option. ZeroEyes is the only company in this space to own and operate its own operation centers staffed entirely by military and law enforcement veterans trained to recognize guns, act quickly but calmly in high-stress situations, and assist first responders with situational awareness until the threat is neutralized.

Q: From how far away can the software identify a brandished gun?

There are too many variables to put a number on it, but they can share some photographic examples if that would be helpful.

Q: Has ZeroEyes successfully detected guns for its customers? Has it been used in production or has it been all tests?

A: ZeroEyes has detected thousands of brandished fake and real guns being brought into schools and other locations. Thankfully, none of them have resulted in a mass shooting. At the end of the day, it is impossible to quantify the mass shooting that doesn't happen.

ZeroEyes has also helped to de-escalate swatting and hoax incidents, as its technology can determine if the threat is real or fake, providing necessary situational awareness to first responders.

Q: Is it possible for their technology to be used for things other than guns? Knives, maybe?

A: ZeroEyes wants to be the master of one video analytic, not a jack of all trades. They are the best at detecting guns, so while it is possible for the technology to be appropriated for other scenarios, ZeroEyes is entirely focused on gun detection. Absolutely nothing but the gun is identified.

Q: What about toy guns or water guns?

A: More and more toy guns are looking increasingly realistic. The frequency at which ZeroEyes sees fake guns is very high - almost daily - and its algorithm detects them. The reason ZeroEyes has human verification is so that the company can further evaluate and notify authorities with non-lethal threat alerts, so its teams can address the situation appropriately. Furthermore, if a toy gun is detected, ZeroEyes helps ensure that proper non-lethal response protocol is followed to de-escalate, minimizing the potential for an escalated situation.

Q: What is the false alarm rate?

A: The ZeroEyes Operations Center (ZOC) is staffed 24/7/365 with military and law enforcement veterans who are specially trained to assess the situation and flag false positives before clients are notified. They also stay on top of social media trends that may encourage students to bring real or fake guns to school, minimizing the impact of false positive identifications. ZeroEyes guarantees customers that they will never receive false alarms due to its human verification process, which is core to the company's solution.

Q: Why is the ZOC such an important component of the company?

A: The ZOC is staffed fully in-house 24/7 by military veterans and experienced first responders who have been specially trained in previous lines of work to understand and identify guns, as well as remain calm and collected during stressful situations. This is the type of expertise and background required to ensure each alert is thoroughly examined within seconds.

Q: How important is the quality of these cameras?

A: Adequate resolution is critical, so ZeroEyes only deploys its solution on digital cameras.

Q: What happens if a camera is down? Wouldn't that leave schools or businesses vulnerable?

A: Actually, an ancillary advantage of this technology is that, should a camera go down or its quality become degraded, the software alerts ZeroEyes staff so that they can notify the client. They can then address the issue and get it back up and running. Most facilities do not have any type of warning system like this; ZeroEyes fills the gap.

Q: How many cameras is ZeroEyes integrated into thus far?

A: ZeroEyes is deployed in thousands of buildings for hundreds of customers across 35+ states, including the US Department of Defense, public school districts and universities, commercial property groups, manufacturing plants, Fortune 500 corporate campuses, shopping malls, places of worship, casinos, retail and more.