



## Safely and easily train first responders to navigate high-risk scenarios with Avrio on Magic Leap.



Avrio enables immersive, augmented reality (AR) training for first responders and emergency managers across a range of high-risk scenarios, tapping Magic Leap's powerful AR platform for realistic and effective experiences in real-world spaces.

### Challenge: Traditional first-responder training is costly, complicated, and often unrealistic

Training first responders and emergency managers for high-risk scenarios – such as fires or active shooters – presents unique challenges. Traditional drills and exercises are costly and logistically challenging to organize, requiring role players and related setup costs. Training often occurs in a specialized facility, rather than the real-world spaces where trainees actually work. There are a limited number of instructors, and some scenarios cannot be safely simulated at all.

Further, these conventional training approaches are rarely customized for the individual. This can limit the efficacy of training, potentially leaving first responders unprepared for scenarios with high stakes and zero margin for error.

### Solution: Avrio on Magic Leap enables immersive training in real-world environments

Avrio provides immersive, augmented reality (AR) training for first responders and emergency managers across a range of scenarios and skills, from response strategy to tactical decision-making. Powered by spatial computing, biometric data, and proprietary machine learning algorithms, Avrio makes training for emergencies both realistic and efficient. Multiple users and remote teams can train in the same kind of spaces where they typically work or respond to emergencies. On Magic Leap's powerful AR platform, these experiences are immersive and effective – helping trainees build skills and prepare for real-world scenarios.

Avrio tailors training content to the user, providing a customized, 1:1 experience, even when instructors are unavailable. This helps to eliminate expensive setup costs and enables users to reset scenarios immediately. First responders regain critical time spent on setup, allowing them to focus on what matters. Finally, Avrio's solution realistically simulates even the most dangerous hazards – from nuclear waste to deadly attacks to wildfires.

## Use Cases & Industries

Avrio provides training across a range of different high-risk scenarios and use cases. Avrio can also build custom solutions for the specific needs of an organization or workforce.

### Firefighter Situational Awareness Training

Firefighters must be able to immediately observe, interpret, respond to, and communicate about an emergency scene, with zero delay time or margin for error. To prepare for these chaotic environments, firefighters need immersive experiences that train their eyes, ears, mind, and voice. Avrio enables firefighters to practice such necessary skills through activities like tabletop exercises, 360° size-ups, wildfire responses, and multiple casualty incidents.

### Virtual Police Training for the Real World

Policing is challenging work. Without the right training, both officers and citizens are at risk. Avrio offers the necessary training to help officers do their jobs correctly and successfully, including complex de-escalation scenarios. Law enforcement officials can use Avrio to complete Peace Officer Standards and Training (POST) requirements, including tabletop exercises, active shooter drills, and de-escalation tactics.

### Collaborative Training Between Agencies

Avrio offers extensive experience supporting inter-agency training for local and federal government agencies. Inter-departmental and inter-agency training includes tabletop and functional drills for high-risk incidents, such as hazardous material release, natural disasters, and real-time threat response. Police, fire, EMS, criminal justice, and other agencies can practice collaboration, easily and realistically with Avrio.



## Key Benefits of the Solution

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### Fully 3D Content

Traditional training methods involve flat projection screens, 2D images, and whiteboard drawings. Avrio's AR experiences put virtual content in real-world spaces in 3D, enabling unprecedented immersion that helps build deep situational awareness and skills. Only Avrio's platform enables total immersion with realistic digital content and human-like interactions – all without sacrificing the collaborative exchanges between trainees who can still see each other in the real world.

### Real-World Spaces

Avrio incorporates your physical surroundings with a setup that takes minutes, not hours or days, and doesn't require specialized preparation. Using a patent-pending approach to digital twins, Avrio provides the only training system on the market that allows you to seamlessly transition from strategic training applications to tactical drills and dress rehearsals. All of this is possible with your own department's target hazards, the very environments where your response matters most.

### Cutting-Edge AI

Avrio's patent-pending artificial intelligence doesn't only create realistic, nuanced interactions with digital characters, such as adversaries and patients; it automatically ensures training exercises are tailored to the department and even to the individual. By collecting and analyzing biometrics alongside performance, cognitive, and contextual micro and macro data sources, Avrio's system is the only one on the market that provides hyper-personalized training at scale.

### World-Class, Multi-User Experiences

Avrio's multiplayer system is built on industry gold standards, allowing the platform to support tens to hundreds of simultaneous training participants, unlike competitors, which are typically limited to 4-6 participants. By analyzing core instructional design needs, each participant can assume a role with fully customized information and content representative of an actual event. Avrio is device-agnostic, allowing participants to join via digital platforms that match their roles, such as a Magic Leap headset, desktop computer, or tablet.

## Why Magic Leap?

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Magic Leap's hands-free headset, powerful optics technologies, and computing platform make Avrio's AR training experiences more immersive and effective. Magic Leap's compute power enables unprecedented rendering, optics quality, and Field of View (FoV), so even complex scenarios are realistic. Avrio leverages Magic Leap's platform for efficacy, innovation, and adoption, using a tech stack built on Unity and cloud infrastructure deployed in AWS.

### Learn more about Avrio

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#### Fire Departments:

[avrio.ai/FORGE/](https://avrio.ai/FORGE/)

#### Police Departments:

[avrio.ai/watchword/](https://avrio.ai/watchword/)