

Ensuring site safety with company workwear and PPE Detection



CHALLENGES

Addressing site access by individuals not wearing company work-wear and PPE in mining locations.

Adherence to safety protocols, including personal protective equipment (PPE), is critical in the mining industry to mitigate risks, prevent injuries and fatalities, comply with regulations and maintain operational efficiency. PPE, such as reflective vests, enhances visibility and reduces the risk of accidents and collisions, especially in low-light conditions. However, companies often struggle to ensure compliance with these

safety regulations using only their existing staff for continuous monitoring. Companies can also face intrusion and trespassing by unauthorized persons at facilities housing critical and potentially dangerous materials, like ammunition and chemicals. Ensuring the safety and security of these facilities was paramount, but manual monitoring was unreliable and impractical for 24/7 operations.

SOLUTION

PPE Detection AI - Automated Monitoring and Alert System

Unleash live offers a comprehensive solution encompassing cameras and networking devices to provide real-time alerting and monitoring capabilities for securing the entire facility. The hardware setup includes a combination of solar-powered and wired cameras, accommodating unique site conditions where cabling was impractical. Mobile and Wi-Fi networks are utilized to ensure reliable transmission of streams for automated AI detection.

Multiple AI models can be deployed to reliably detect company work-wear and PPE, distinguishing between company staff and others. These models are optimized to account for various occlusions, such as trees and other objects and measures were taken to minimize false positives, ensuring the operational reliability of security warnings.

The solution also monitors PPE compliance among the staff, providing reliable evidence of employees not meeting strict PPE requirements. Site safety teams receive real-time alerts on potential safety issues via text messages and emails, complete with visual evidence. Additionally, teams will have access to short video clips around the time of each alert for better situational awareness, allowing for immediate action.

Our turnkey solution can be fully deployed and operational within a week, empowering safety teams to ensure the security of critical facilities 24/7.



Unleash live's PPE Detection AI in action



Metropolis Partner
Nvidia Partner for high performance visual computing



AWS Technology Partner
AWS Public Sector, Transport, Energy and Disaster Management Partner



Partner for edge solutions built for scale

BENEFITS



Situational Awareness

Access live streams and clips of safety incidents for enhanced situational awareness and comprehensive security audits.



Fast Deployment

Our solution can be deployed within weeks, with no model training requirement, allowing for rapid implementation and immediate benefits.



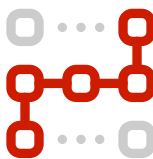
GDPR Compliance

Fully compliant with GDPR, ensuring privacy protection and adherence to regulations, providing a secure and lawful solution.



Continuous Monitoring

Enjoy the peace of mind with unmanned, 'always-on' monitoring. Receive alerts only when attention is required, ensuring critical situations are promptly addressed.



System Integration

Easily integrates with your existing safety and operational technology (OT) systems. Alerting and analytics can be seamlessly incorporated into your current workflows.



FEATURES

Our solution ensures your site remains compliant, secure and efficient, safeguarding your personnel and operations with state-of-the-art AI technology.



Flexible and Bespoke Safety Rules

Our solution is adjustable to meet unique site requirements and conditions, ensuring it fits your specific safety needs.



Long-Range Detection

Our AI technology can detect people with or without PPE and workwear from distances up to 20 meters, ensuring comprehensive coverage of your site.



Open APIs

Seamless integration into in-house predictive analytics systems for comprehensive insights.



Remote Live Streaming

Safety teams can access remote live streaming options for enhanced situational awareness, providing a real-time view of site conditions.



Real-Time Alerting with Visuals

Receive real-time alerts with visuals of the safety situation, allowing for immediate judgment and intervention as necessary.



Secure and Easy User Administration

Easily manage authorized safety team members' access to alerts and live streams, ensuring secure and straightforward user administration.

Get started with Unleash live

We offer multiple flexible options to engage with us commercially, regardless of the size of the project.

Explore the possibilities

Contact our team at unleashlive.com/contact to discuss your use case

Proof of Concept

Interested in a Proof of Concept or pilot, [contact one of our experts](#) today.

AWS Marketplace

If you are an AWS customer, Unleash live can be procured via the AWS marketplace