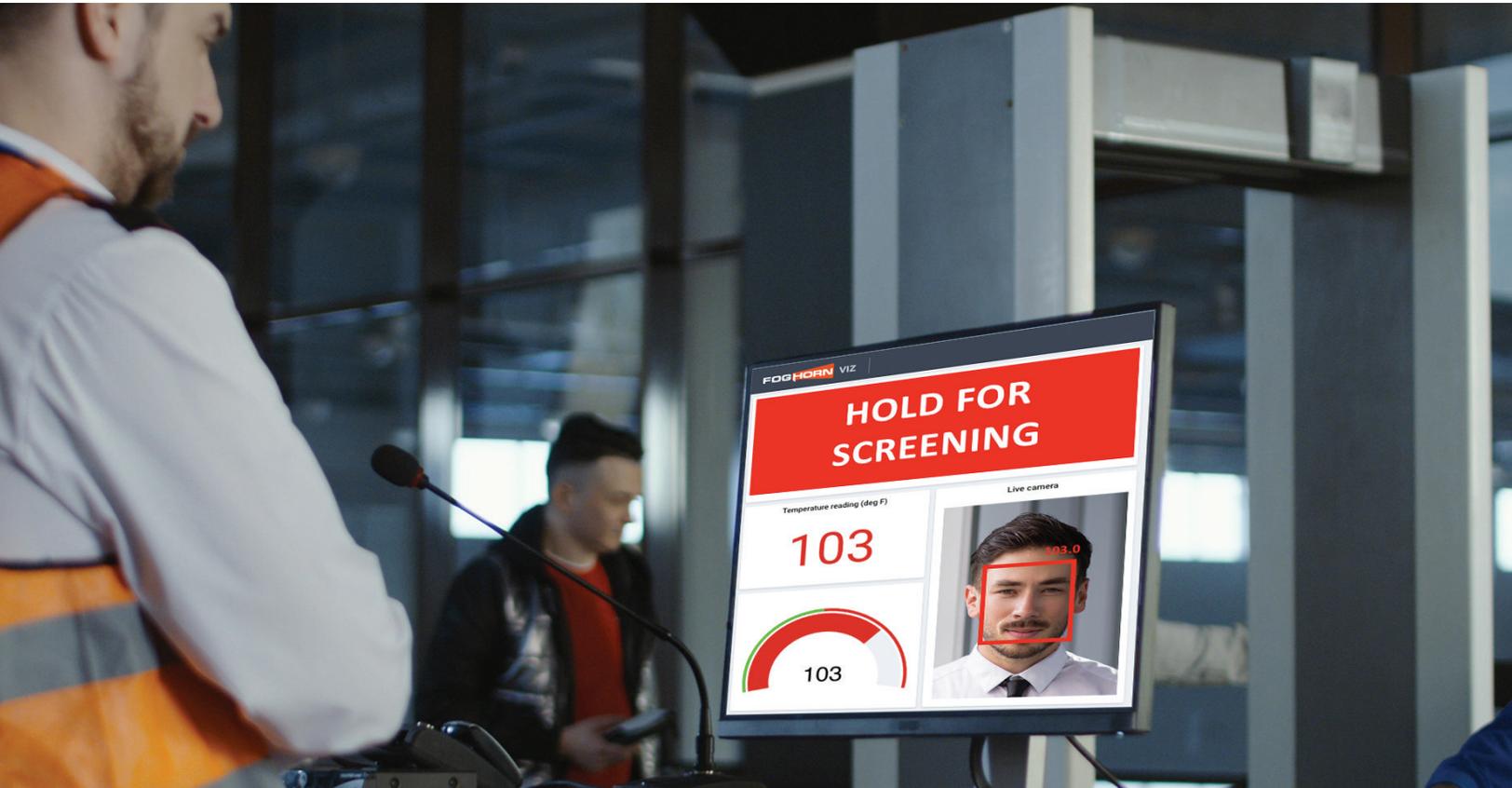# FOGHORN

Lightning™ Health and Safety Solutions

Gain immediate insights by rapidly deploying Edge AI with Lightning Solutions

Out-of-the-Box Intelligence and Insights

FogHorn Lightning™ Solutions are out-of-the-box packages of FogHorn's award-winning Lightning Edge AI platform, preconfigured with use-case specific machine learning models, notification capabilities and visualization dashboards.

Lightning Solutions allow organizations to rapidly deploy edge AI and immediately derive insights to common problems. Use them individually or combine solutions to create a tailored system over time.

Immediate ROI

Quick to deploy, solutions can be set up in as little as a few hours. Simply connect your data inputs and calibrate it for your environment. Lightning Solutions are also extensible in our enterprise editions with unlimited opportunities to customize with additional data science or integrate with your existing IT systems, video management software, access control systems and more. Work with FogHorn's services team or one of our many system integration partners.
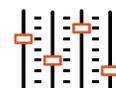
Install

Deploy to Intel, Arm or Android-based devices

Connect

Configure the required data inputs

Calibrate

Tune the solution for your environment

Operationalize

Set-up alerts, dashboards and data publishing

Lightning Health & Safety Solution Suite

Lightning Health and Safety Solutions help improve the safety of workplaces and mitigate the spread of contagious illnesses, as organizations across the globe get back to work.

Body Temperature Detection

An elevated body temperature (EBT) is a prominent indicator of a contagious illness like the common cold, flu and COVID-19 which can all impact the ability for organizations to operate safely and efficiently.

How it Works:

- Ingests live video streams from thermal and RGB camera(s)
- Executes deep learning models to isolate tear ducts for increased temperature accuracy
- Generates alerts via email or text when temperatures fall outside acceptable ranges
- Publishes live updates to dashboards at points of entry and management consoles

Social Distancing Monitoring

Social distancing is important for reducing the spread of illnesses, but monitoring and reminding people of proper distances is a challenge, often requiring manual supervision.

How it Works:

- Ingests live video streams from standard RGB camera(s)
- Executes deep learning models to determine people within the frame and their distance from one another within inches
- Generates alerts via email or text when distance thresholds are violated
- Publishes live updates to dashboards in common areas and management consoles

Mask Detection

Face coverings and masks are another important mitigation method for reducing the spread of contagions and is becoming a requirement before people can enter a variety of business and social settings.

How it Works:

- Ingests live video streams from standard RGB camera(s)
- Executes deep learning models to identify faces & features and if people are wearing masks from medical to homemade facial coverings
- Generates alerts via email or text when masks are not identified
- Publishes live updates to dashboards at entry points, common areas and management consoles

Cough Detection

Excessive coughing is another indicator for a variety of contagious illnesses. Sporadic coughing can be common, but steady coughing may indicate the need to assess your employee's health status.

How it Works:

- Ingests live audio from standard RGB camera(s)
- Uses machine learning models to identify cough sounds from other noise (equipment, conversations, etc.)
- Generates alerts via email or text when steady coughing is detected
- Publishes live updates to dashboards at points of entry and management consoles

Hand Washing Monitoring

Improper hand washing and the resulting touches to shared surfaces may be the leading cause of virus spread. Ensuring people wash for the proper duration of time is critical to maintaining a sanitary environment.

How it Works:

- Ingests live video streams from standard RGB camera(s)
- Executes machine learning models to identify a sink and detect hands and wrists while tracking the time of the session
- Generates alerts via email or text when time thresholds are not met
- Publishes live updates to dashboards and management consoles

"In the current environment, health and safety auditing has become pivotal for every organization to ensure the well-being of its workforce. This unprecedented scale of ubiquitous monitoring will become the new normal and shall only be achieved via an automated and fool-proof solution. FogHorn's Lightning Health & Safety solution uses real-time edge analytics to solve this exact conundrum for institutions. The solution's AI capabilities transform live streams from video cameras or other sensor-filled endpoints into highly automated real-time alerts and actionable insights. The solution seamlessly automates the entire process for health, safety, and hazard detection, ensuring the workforces' well-being."

NEIL SHAH
VICE PRESIDENT OF RESEARCH
COUNTERPOINT RESEARCH

Safety Solution Suite

Personal Protective Equipment (PPE) Detection

Wearing personal protective equipment (PPE) such as hard hats, vests, eyewear and masks, are a critical safety measure for industrial companies. Video monitoring with Edge AI can replace manual enforcement, help reduce injury and increase productivity.

How it Works:

- Ingests live video streams from standard RGB camera(s)
- Executes deep learning models to detect people, body parts and target PPE
- Generates alerts via email or text when specified PPE is not present
- Publishes live updates to dashboards at points of entry, management consoles and other locations.

Custom Hazard Detection Projects

Many hazards appear in commercial and industrial environments that can impact worker safety, including moving cranes and falling debris, trip hazards, slippery surfaces and even gas leaks. FogHorn's data science team can customize solutions for you to meaningfully enhance worker safety.

How it Works:

- Ingests live video streams from standard RGB camera(s)
- Executes custom-designed deep learning models for your selected workplace hazard
- Generates alerts via email or text when specified PPE is not present
- Publishes live updates to dashboards at points of entry, management consoles and other locations.

About FogHorn Systems

FogHorn is a leading developer of "edge intelligence" software for industrial and commercial IoT application solutions. FogHorn's software platform brings the power of advanced analytics and machine learning to the on-premises edge environment enabling a new class of applications for advanced monitoring and diagnostics, machine performance optimization, proactive maintenance and operational intelligence use cases. FogHorn's technology is ideally suited for OEMs, systems integrators and end customers in manufacturing, power and water, oil and gas, renewable energy, mining, transportation, healthcare, retail, as well as smart grid, smart city, smart building and connected vehicle applications.

http://foghorn.io