

AI Deep Learning Fire & Smoke Detection

Industry's First Artificial Intelligence to Detect Fire & Smoke based on Videos for Investigation and Real-Time Alerts

IronYun AI Fire Detection Model accurately identifies fire and smoke in real time and on demand, as well as generating alerts when a flame is detected or there is more smoke than a certain threshold. The AI Fire video analytics is suitable for use both indoors and outdoors to guarantee safety, provide ample time to react, and protect people and properties.

With the capability to process both real-time video streams across multiple cameras and historical data on demand, the **AI Fire Detection** solution can be deployed for large-scale facilities such as manufacturing plants, school campuses, and amusement parks, or installed in mid-size office buildings, stores, and apartment complexes.

No calibration is required to adapt the system to the usage environment. **AI Fire Detection** is ready for use on day 1 after a simple setup and connection into the local network structure of cameras and storage device.

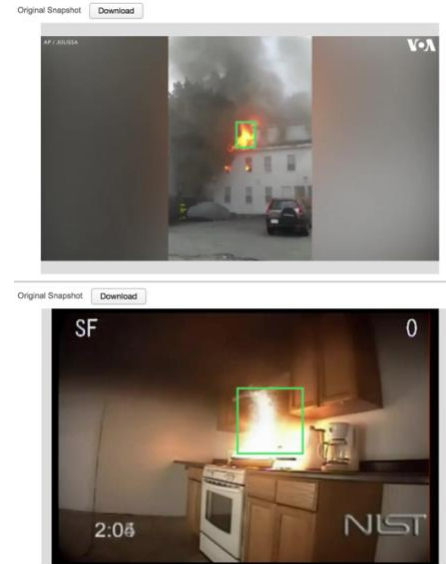


Figure 1 - Fire detection indoors and outdoors

Features

Analytics & alert features:

- Detect fire and smoke that appear in the footage from standard video surveillance IP or analog cameras
- Provide critical video images to handle fire incidents in real time
- Detect fire and smoke in real time across multiple cameras (< 1 seconds) and send alert to any SMS, smart phone, and/or e-mail servers
- Provide a simple-to-use Graphical User Interface (GUI) for alert generation
- Support mobile app for smart phones (iPhone, Android) to enable detection and receive alert on-the-go for peace of mind

Integration:

- Fully integrate with IronYun AI NVR product line
- Integrate with all ONVIF IP-based IP cameras, no special camera equipment required
- Function as a stand-alone appliance or integrate with existing VMS and/or sensor-based detection systems to increase the range of alert actions (water spraying, notification lighting, siren, etc.)
- Can provide software module for installation and upgrade in IronYun AI NVR appliances
- Can provide software module that can be run on any standard Intel x86 servers with Nvidia or Intel GPU

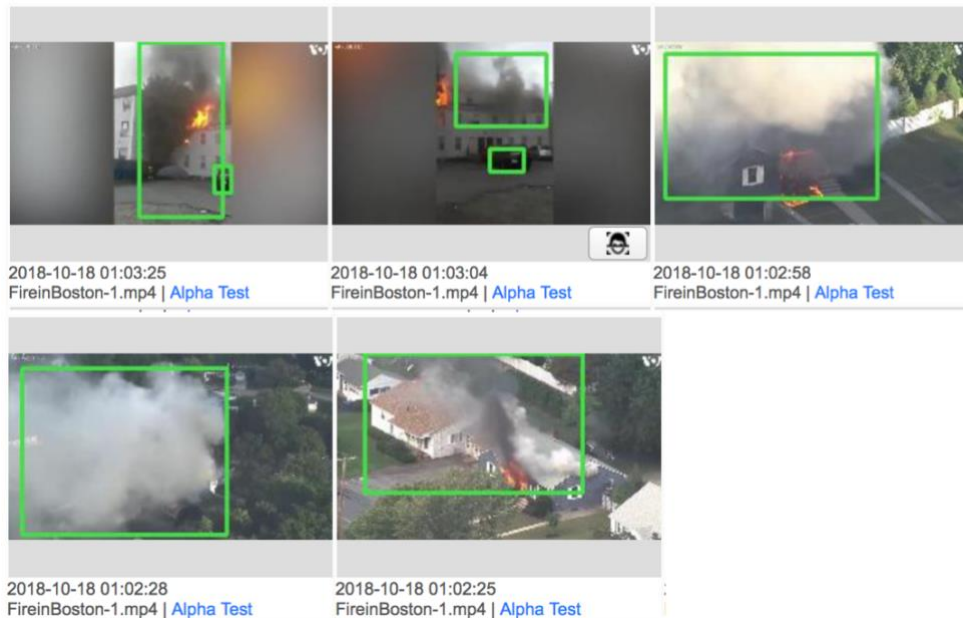


Figure 2 - Smoke detection

Example Use Cases

1. **Minimize potential damage caused by fire and smoke:** real-time alerts are configured to the appropriate notification and action when fire/smoke is detected. The user can adjust the confidence level based on the use case. For example, for an environment with common open flames, such as a kitchen or an area with a fireplace, one should select a higher confidence level to avoid receiving too many false alarms; however, an environment that should not have any open flame, such as an office, should select a low confidence level to avoid missing any useful information.

2. **Find evidence to corroborate/disprove claims:** with **AI Fire Detection**, investigator organizations such as police departments and insurance companies can now search for evidence to support/deny a claim made by the end user. The investigator can simultaneously search in multiple files, retrieve the results within seconds, identify the cause of incidents, save investigation time and manpower, and minimize cost.

About IronYun

IronYun is a global leader in highly-secured cloud video and big data solutions for video surveillance applications. Our products have been successfully deployed by many government, university and corporate enterprise customers. And our solutions deliver unmatched performance, scalability and cost savings. IronYun has world-wide offices in the United States, East and Southeast Asia (Japan, Taiwan, Korea, Thailand, and Singapore), and the Middle East.

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