



DeepinMind Series NVR

Behavior Analysis

Behavior Analysis

Behavior Analysis



iDS-9632NXI-I8/BA
iDS-6704NXI/BA

Based on deep learning algorithms, Behavior Analysis NVR supports the detection of not wearing hard hat, work behavior, street behavior and perimeter, and timely triggers alarms, which can effectively improve the security of various places.

Hard hat Detection

- ✓ Not wearing hard hat detection: facial recognition is supported for people not wearing hard hat

Work Behavior Analysis

- ✓ Absence/ sleep on duty detection
- ✓ People overstay (loitering) detection
- ✓ Number of people exception detection
- ✓ Using mobile phone detection

Street Behavior Analysis

- ✓ People gathering detection
- ✓ People running detection
- ✓ Violent motion detection
- ✓ Falling-down detection

Perimeter Protection

- ✓ Line crossing detection
- ✓ Intrusion detection
- ✓ Region entrance detection
- ✓ Region exiting detection

- Each channel supports behavior analysis of hard hat detection / work behavior analysis / street behavior analysis / perimeter protection
- Assigning intelligent performance according to project needs, for example: channel 1 for hard hat detection, channel 2 for street behavior analysis (including people gathering detection, people running detection, violent motion detection and falling-down detection)

System Architecture

HIKVISION

Front End

DeepinMind Behavior Analysis NVR

Platform



Video



Analysis
Result



Analysis
Mission

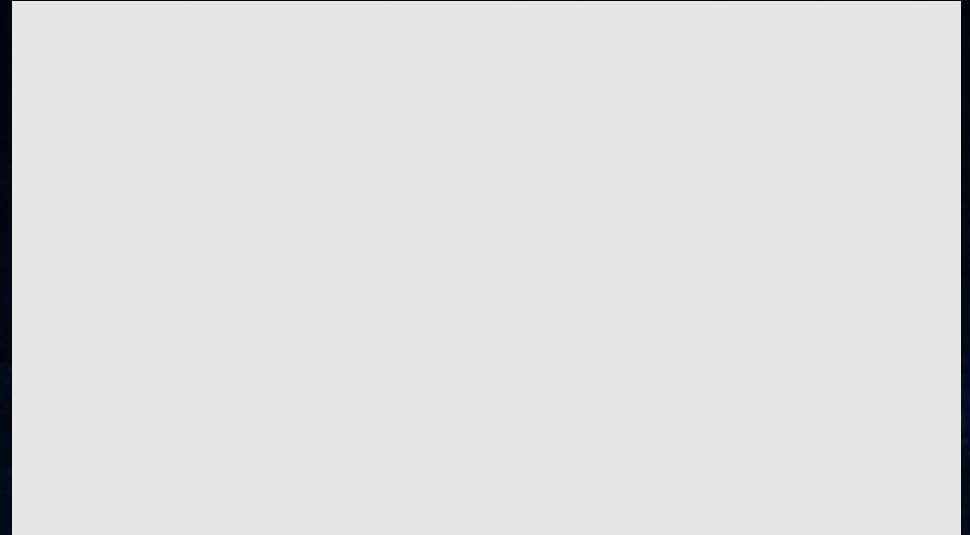


Hard hat detection



Not wearing hard hat alarm + facial recognition

- Detects whether a person wears a helmet or not, and timely triggers alarm when someone does not wear a helmet, which is essential to ensure safety
- Facial recognition is supported for people not wearing hard hat



Scenarios:



Construction Site



Petroleum Industry



Entrance & Exit

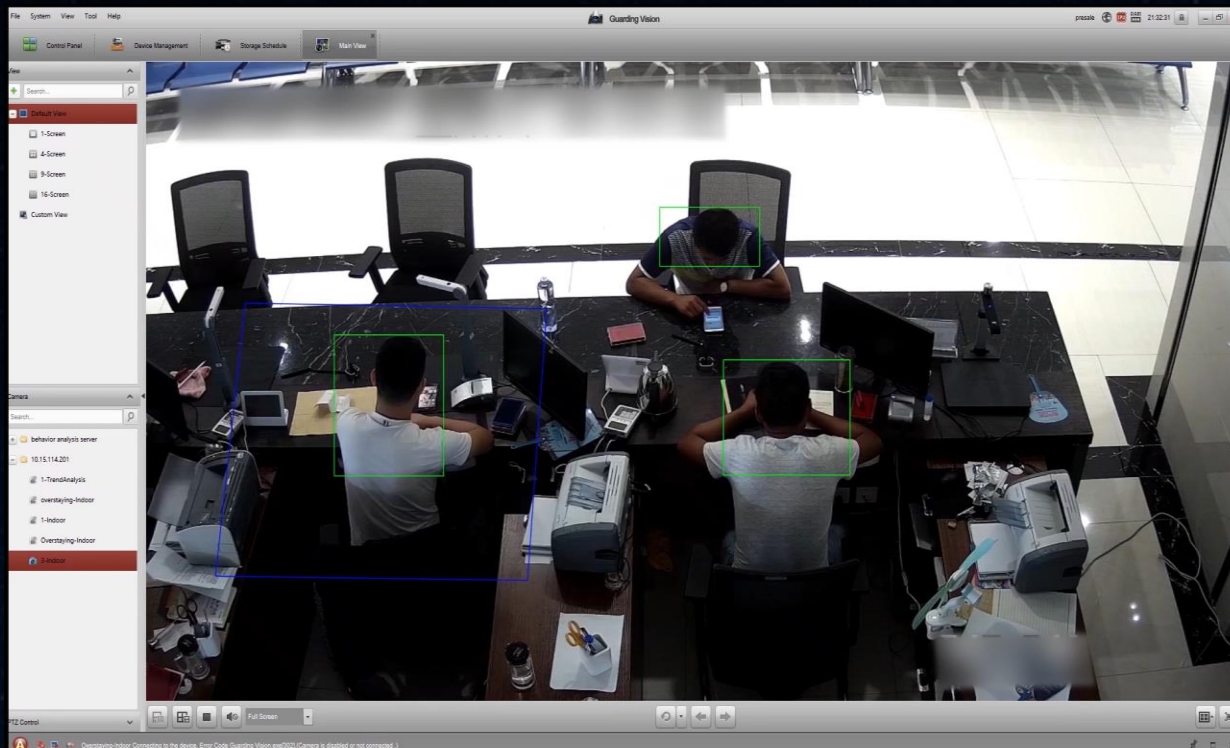


Substation

Work Behavior Analysis

Absence/ sleep on duty/ using mobile phone detection

- Detecting the movement of a person on duty in the detection area who is absent or staying motionless or playing mobile phone
- Application Scenarios:
In many scenarios, it is essential to keep staff on duty.



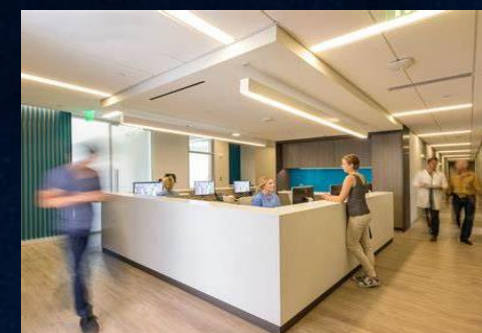
Fire Control Room



Border Post



Service Center



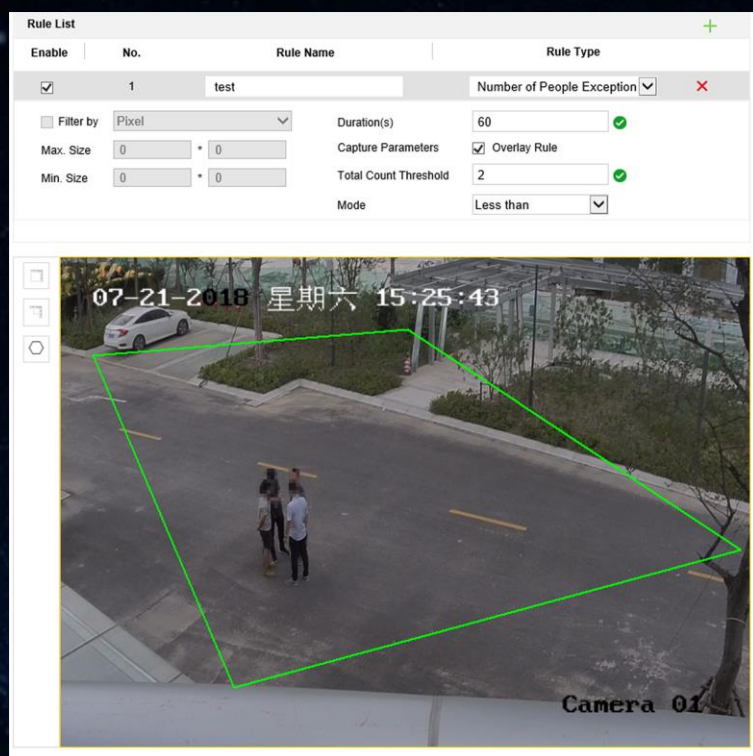
Nurse Station

Work Behavior Analysis

Number of people exception detection

- Counting the amount of people in the detection area, when the number reaches the threshold, it will trigger an alarm.

- Application Scenarios:
In many scenarios, the number of people is restricted.



Vault



ATM



Energy



Correctional Facility

Work Behavior Analysis

People overstay (Loitering) detection

- Triggering alarm when overstay time of the target is beyond the set value in the detection area.

- Application Scenarios:
Sensitive area that not allowing overstay



Building



Correctional Facility

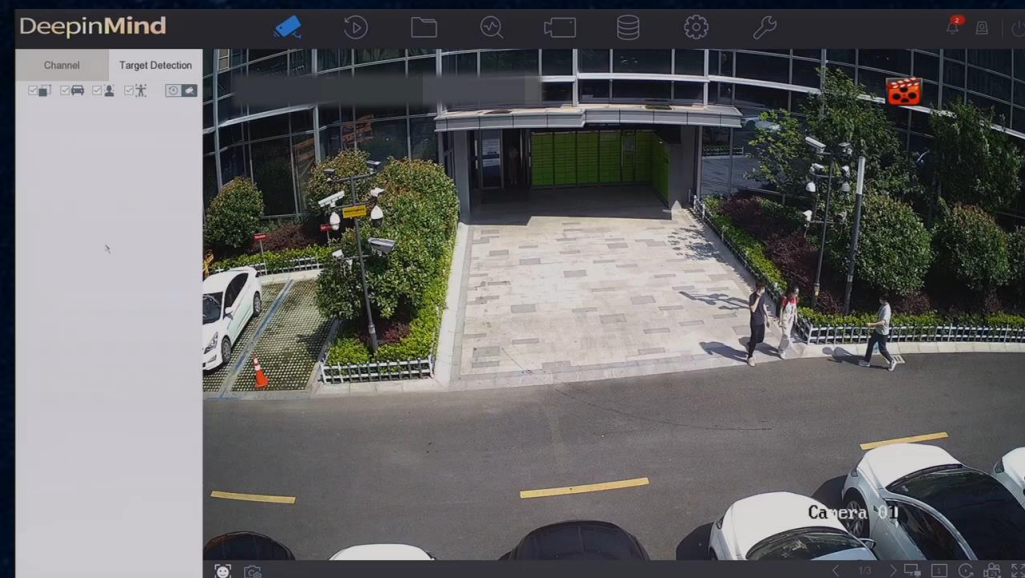
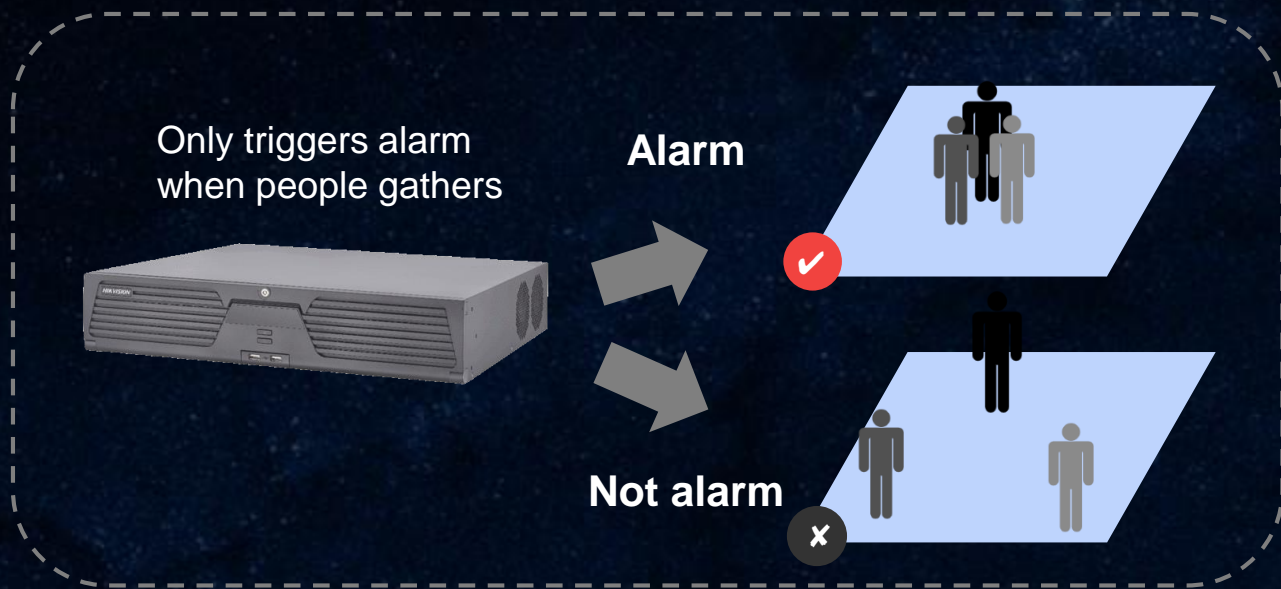
Street Behavior Analysis

People gathering detection

- **Detecting the gathering of people and timely giving alarms:**

threshold: number of gathering people, duration
It will not trigger alarm when people are away from each other.

- **Scenarios:**
In some places, gathering of people may lead to great health or crime risks, such as square, retail, warehouse, school. etc.



Street Behavior Analysis

People running detection

- Detecting the running behavior of people in the scene



Square



Violent motion detection

- Detecting the violent motion of people in the scene, such as fight.



Street



Park



People falling down detection

- Detecting people in the area who falls down suddenly.



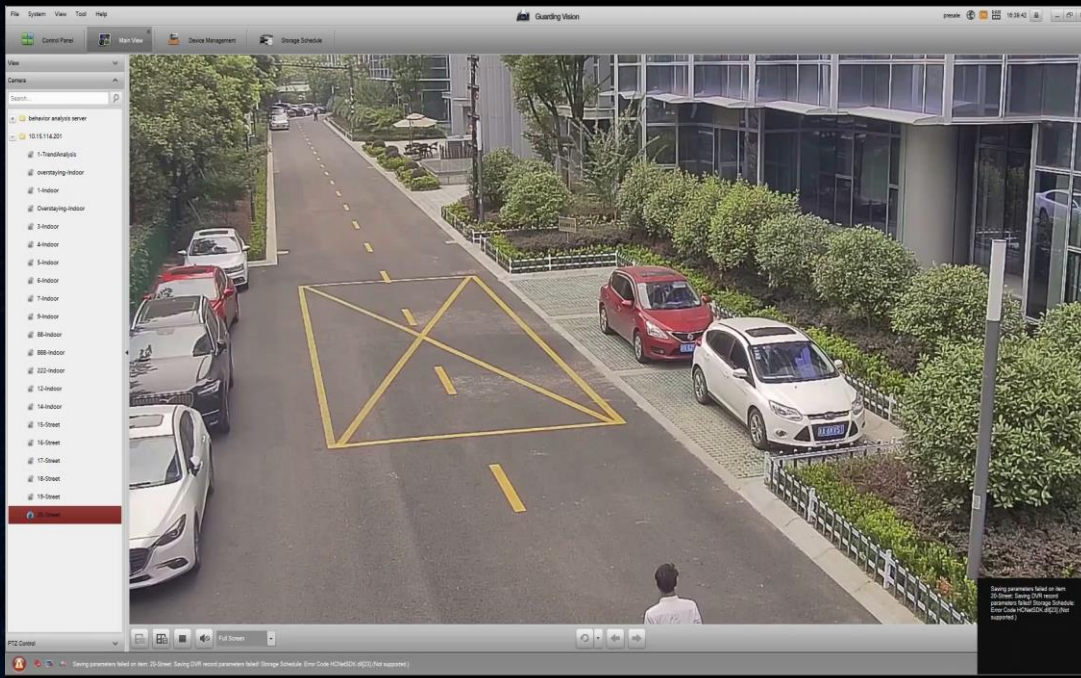
Station



Street Behavior Analysis

People falling down detection

Fall is closely related to danger. Fall detection helps to detect people who falls down suddenly and give an alarm in time. Previously it could only be achieved by human or wearable inspection tools, which was not highly effective. Now, based on deep learning video analysis technology, Hikvision has developed intelligent fall detection, making it more convenient and effective.



Community with many empty nesters



Street



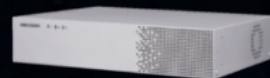
Hospital



Nursing Home

Product Showcase- Behavior Analysis

HIKVISION



		DeepinMind NVS	DeepinMind NVR
Model		iDS-6704NXI/BA	iDS-9632NXI-I8/BA
Analysis Performance		4-ch 1080P	4-ch 1080P
Behavior Analysis	Not wearing hard hat detection	Up to 4-ch , facial recognition is supported for people not wearing hard hat	
	Work behavior analysis	Up to 4-ch , including absence/sleep on duty detection, people overstay detection, number of people exception detection, and using mobile phone detection	
	Street behavior analysis	Up to 4-ch , including people gathering detection, people running detection, violent motion detection and people falling down detection	
	Perimeter protection	Up to 4-ch , including line crossing detection, intrusion detection, region entrance detection, and region exiting detection	
	Note: The above analysis performance is the maximum performance when a device analyzes the same type of tasks.		
Face library		16 libraries with 100,000 pictures in total	32 libraries with 100,000 pictures in total
Storage Capacity		Built in 1TB HDD	8*10TB HDD interfaces

Thanks

See Far, Go Further