



# PANOPTICON **ADVANCED** SECURITY SYSTEM

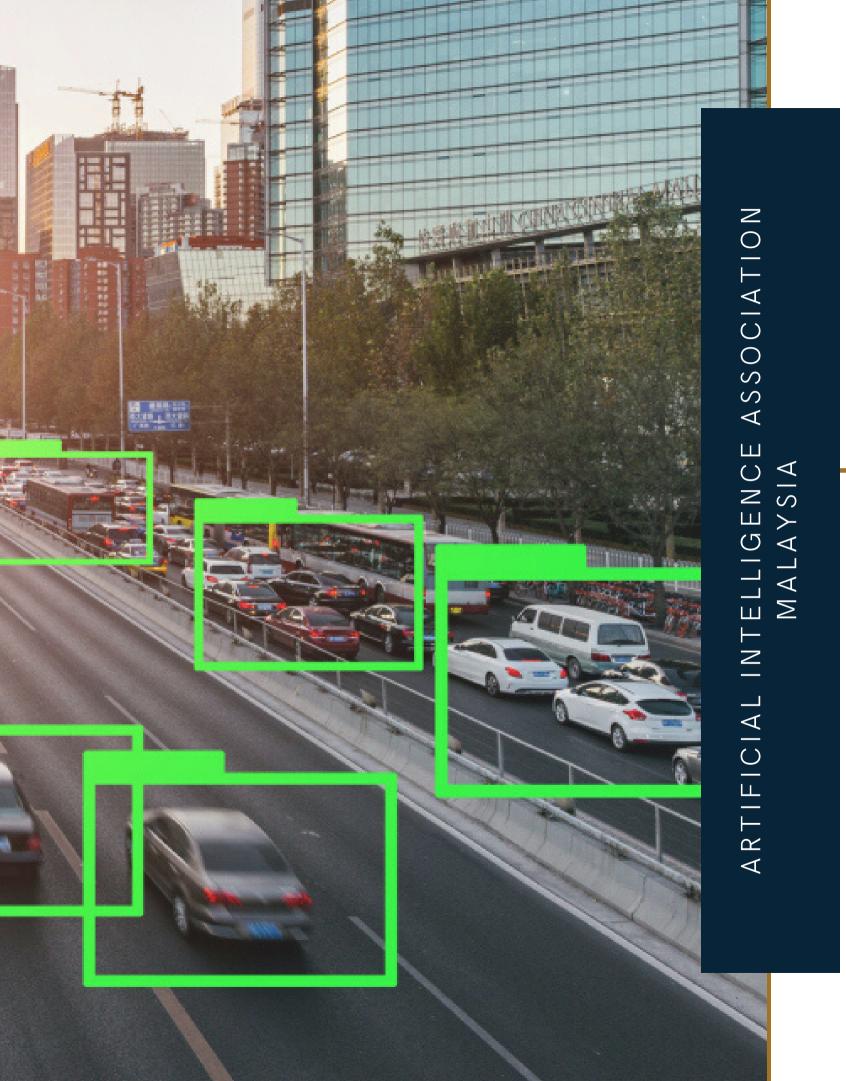
PPM-011-10-29012021

# **PANOPTICON ADVANCED SECURITY SYSTEM** ABOUT

A well-crafted city surveillance system will deter vandals and prevent security threats, and the best installations go unnoticed by the public at large. Panopticon provides a series of front-end devices in various applications to provide strategic surveillance and prevent criminal activities. And when events do occur, this City Surveillance System significantly improves efficiency for post-event investigation

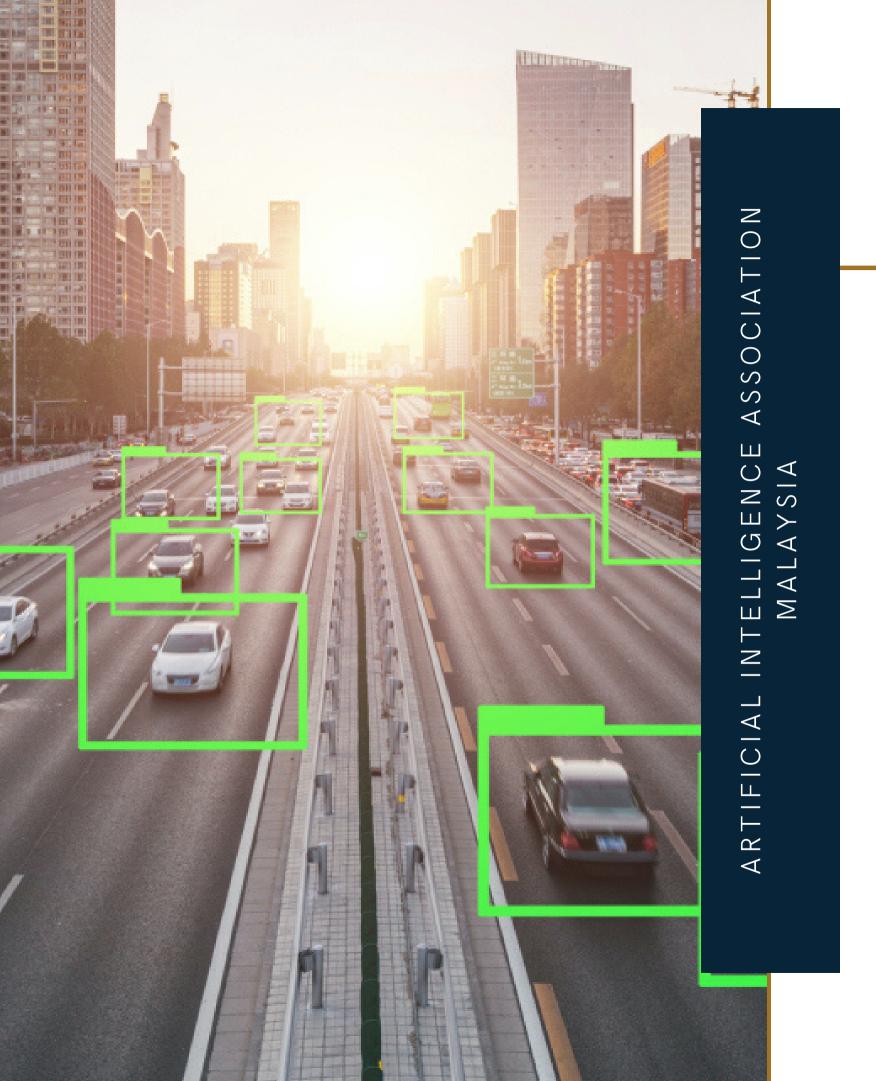


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The Panopticon Safe City Solution provides sound, stable, and reliable municipal security. It features a series of advanced technologies and various security subsystems to safeguard industries, centralize operations, and integrate security platforms. These integrated technologies enable rapid and effective responses to security needs and events.

# PANOPTICON SAFE CITY CONCEPT



# **PANOPTICON SAFE CITY**

All componentry, software, and services in the Safe City Solution reinforce public administration, improve people's lives, and boost substantial, long-term development. Panopticon's Safe City Solutions features:

- linkage, and smart linkage;
- retrieval;
- footage, and valuable statistics.

• Data collection with front-end processing, entrance & exit control, ID verification, under-vehicle surveillance, alarm

• Personnel protection, forensic investigation, vehicle surveillance, parallel analysis, video patrol, and information

• Status analysis, comprehensive assessment, preventive measures, data relationship mining, centralized security

I he Panopticon is a type of institutional building and a system of control designed by the English philosopher and social theorist Jeremy Bentham in the 18th century

ARTIFICIAL INTELLIGENCE ASSOCIATION MALAYSIA

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# **BUILDING THE** FUTURE CITY WITH PANOPTICON

**3 PHASE OF DEVELOPING SAFE CITY CONCEPT** 





#### PHASE ONE (P1)

Basic City Surveillance

#### PHASE TWO (P2)

Intelligent Video System

# **PHASE THREE (P3)** Data Fusion and Sharing



#### P1 - BASIC CITY SURVEILLANCE

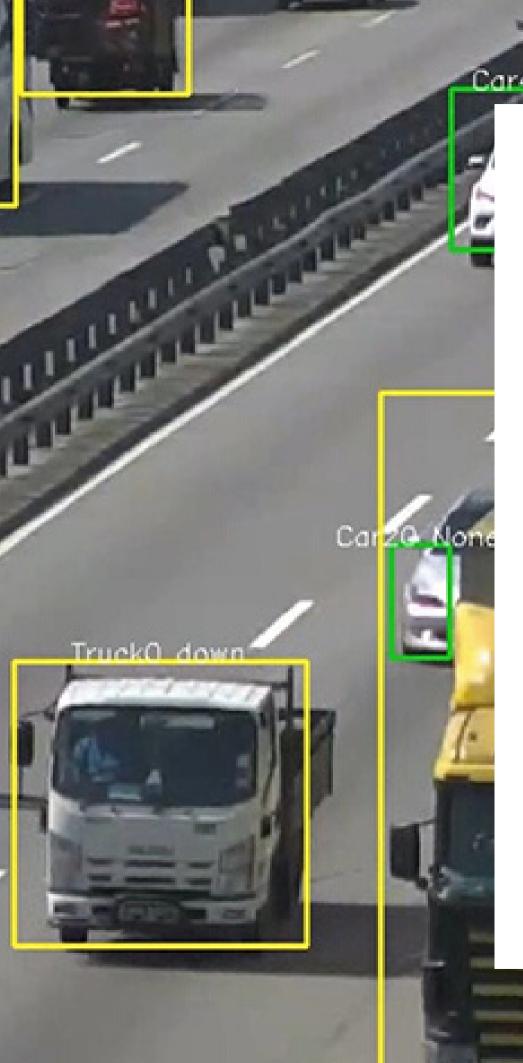
Build CCTV surveillance systems that cover critical areas of a city and integrate video data between such areas to visualize the underlying security status at city levels.

#### P2 -INTELLIGENT VIDEO SYSTEM

Implement AI capabilities and applications on top of public security resources to promote the intelligent transformation of a city's video system, turning video into IoT data. Clients will likely benefit from higher efficiency in patrols, law enforcement, and resource scheduling at this phase.

#### P3 - DATA FUSION AND SHARING

Fuse IoT data generated in the intelligent video system with data from information networks according to practical business needs, then provide value-added services and applications. Clients will quickly enjoy precise situational awareness around a city.



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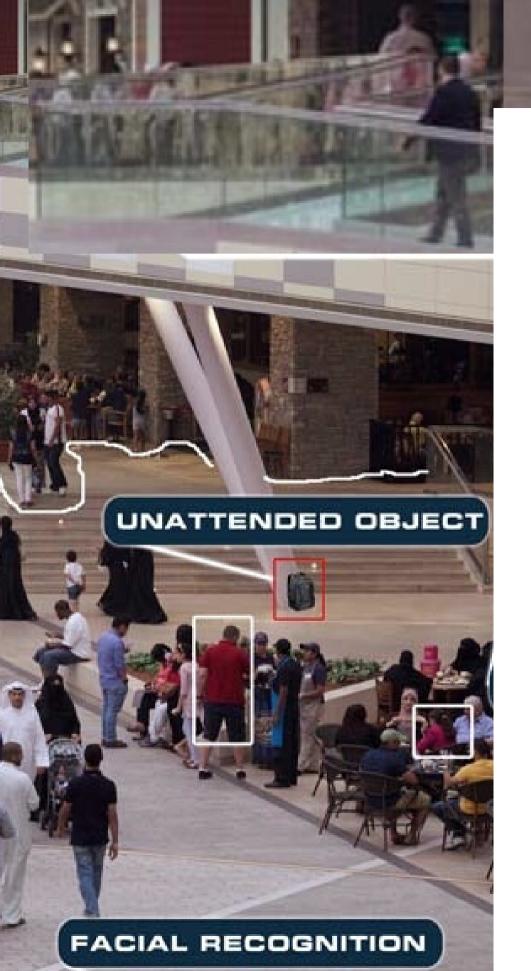
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AVLYTICS FOUND [
POSITIVE MATCHES

ARTIFICIAL INTELLIGENCE, MACHINE LEARNING & DEEP LEARNING

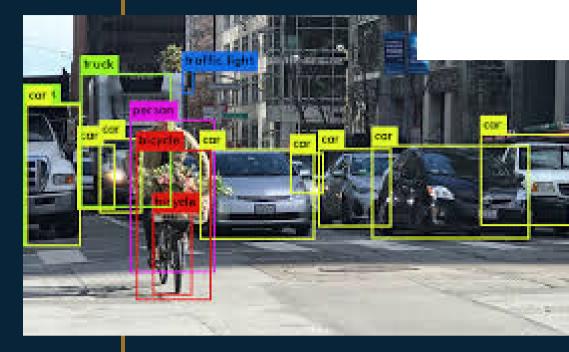
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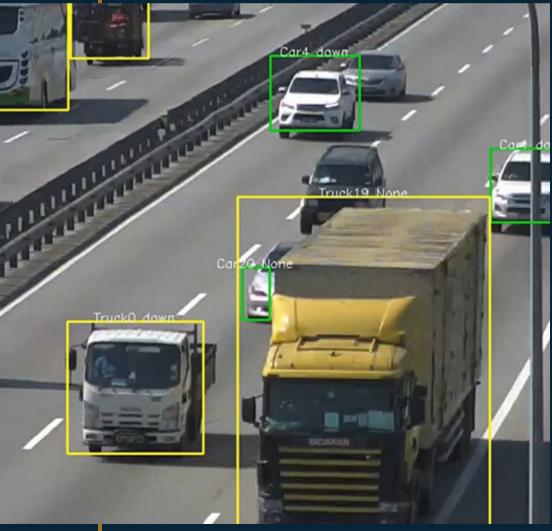
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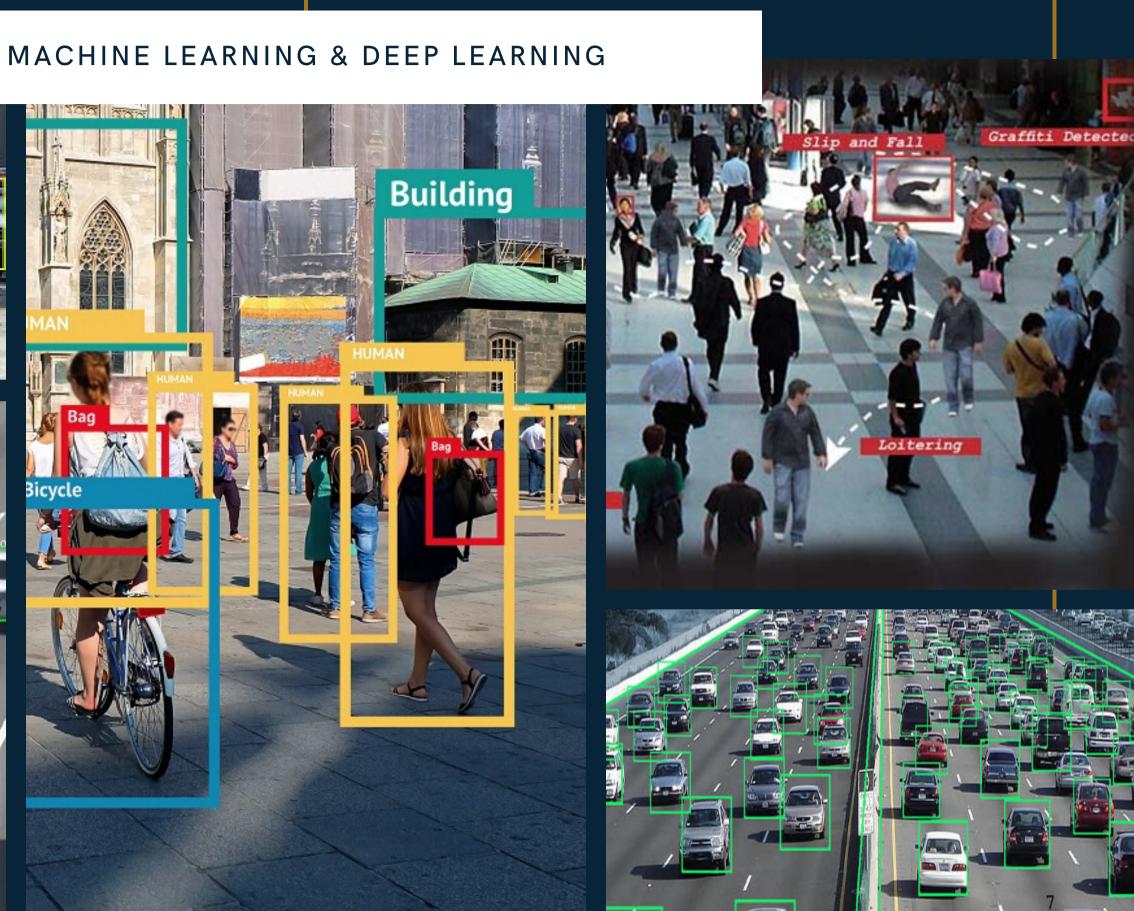


LOITERING

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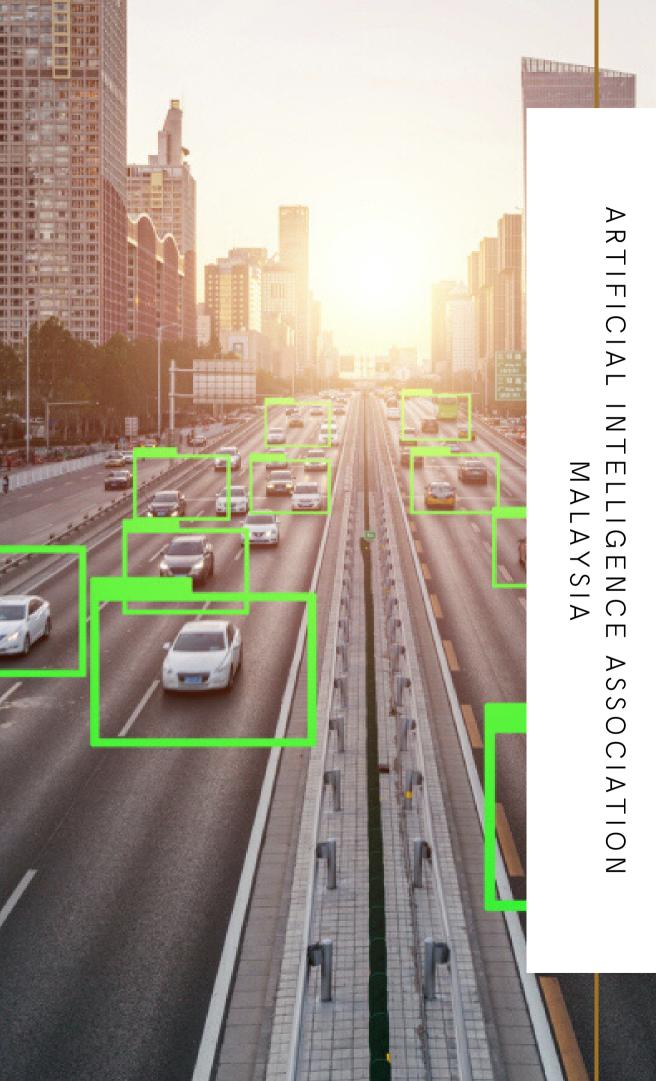




# MACHINE LEARNING & DEEP LEARNING

Machine learning enables a computer system to make predictions or take some decisions using historical data without being explicitly programmed.

Prediction like machine learning but more great



# PANOPTICON DEEP MACHINE LEARNING

#### TRAIN YOUR AI

We implement a turnkey AI video analytics training program to meet your specific needs. To achieve the highest possible accuracy, we leverage your system with neural networks trained using videos from your actual site and suited to your specific tasks.

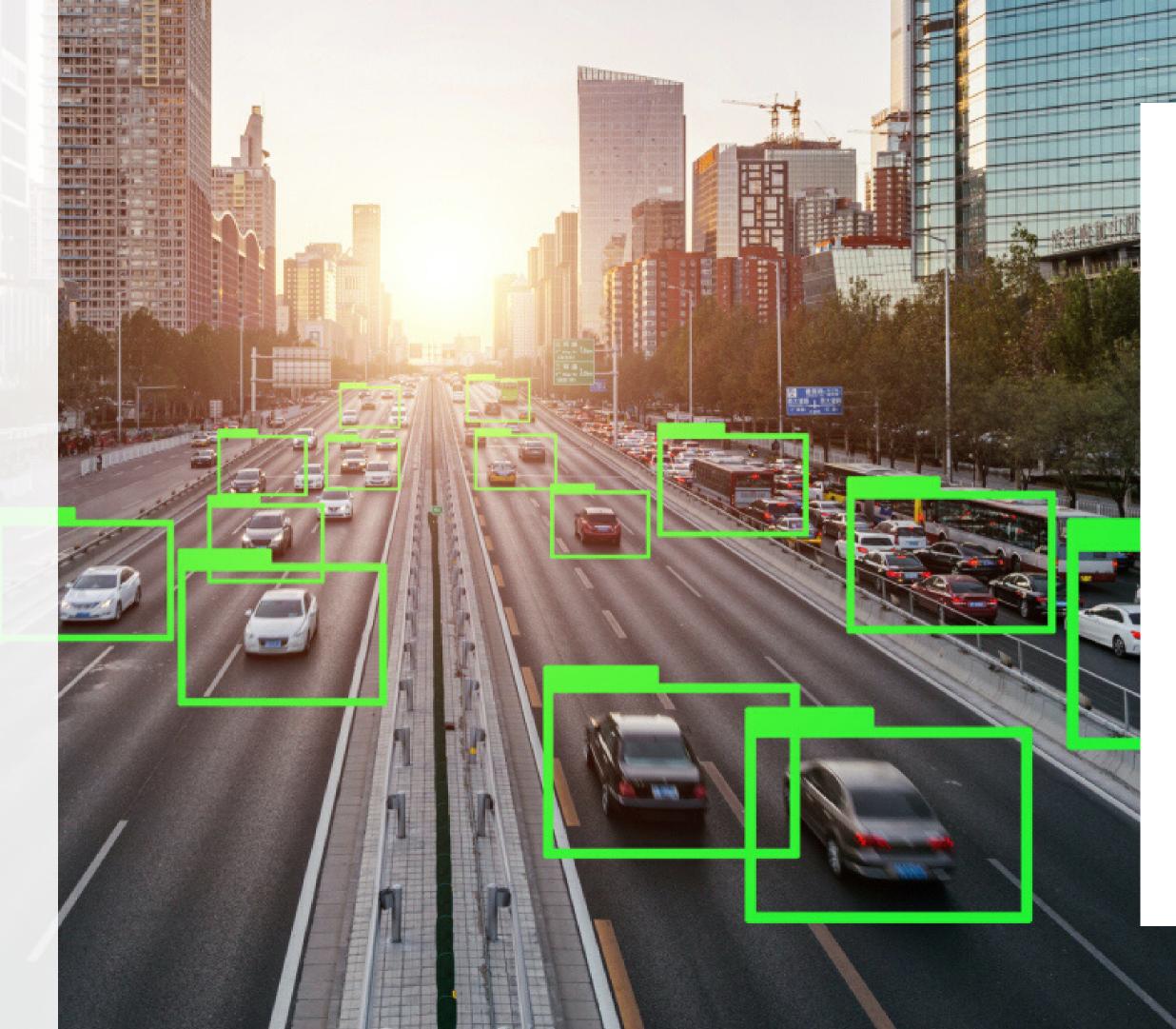
### PRE-EMPTIVE DETECTION

You can use Panopticon AI-powered analytics for a variety of security needs, including face and number plate recognition, early fire detection, detecting potentially dangerous conditions, and tracking objects of specific types.

### BOOST CRIME AND LOSS PREVENTION

Providing early notification to first responders enables police or corporate security personnel to quickly neutralize the threat and make their response actions more effective.

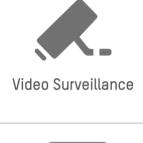
# SYSTEM TOPOLOGY ALGORITHM DEVELOPMENT PHASE



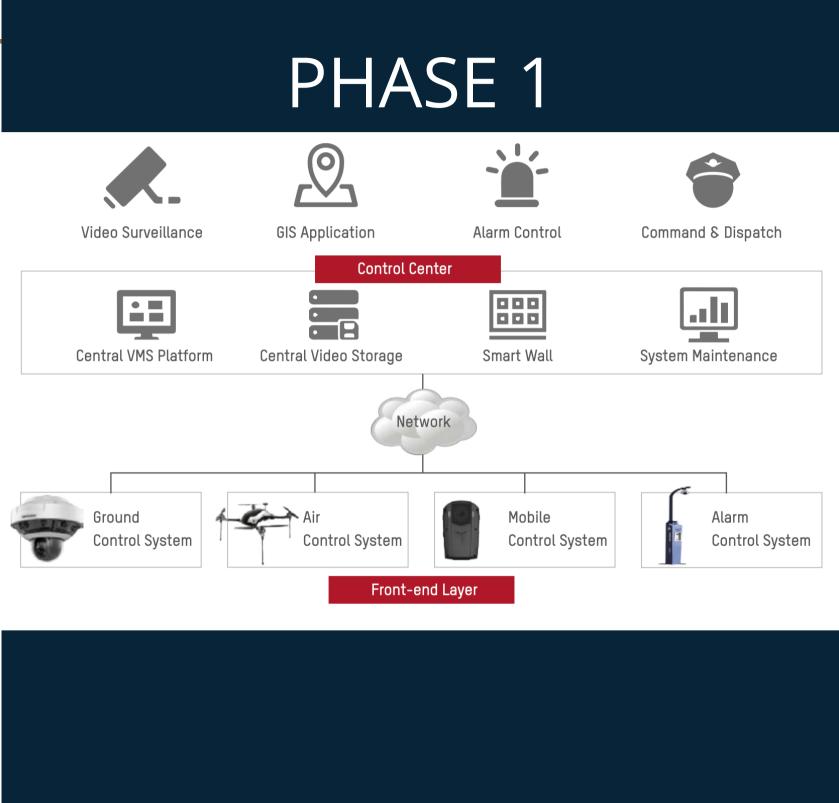
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# **CITY SURVEILLANCE**

A well-crafted city surveillance system will deter vandals and prevent security threats, and the best installations go unnoticed by the public at large. Pani provides a series of front-end devices in various applications to provide strategic surveillance and prevent criminal activities. And when events do occur, this Panopticon City Surveillance System significantly improves efficiency for post-event investigation.

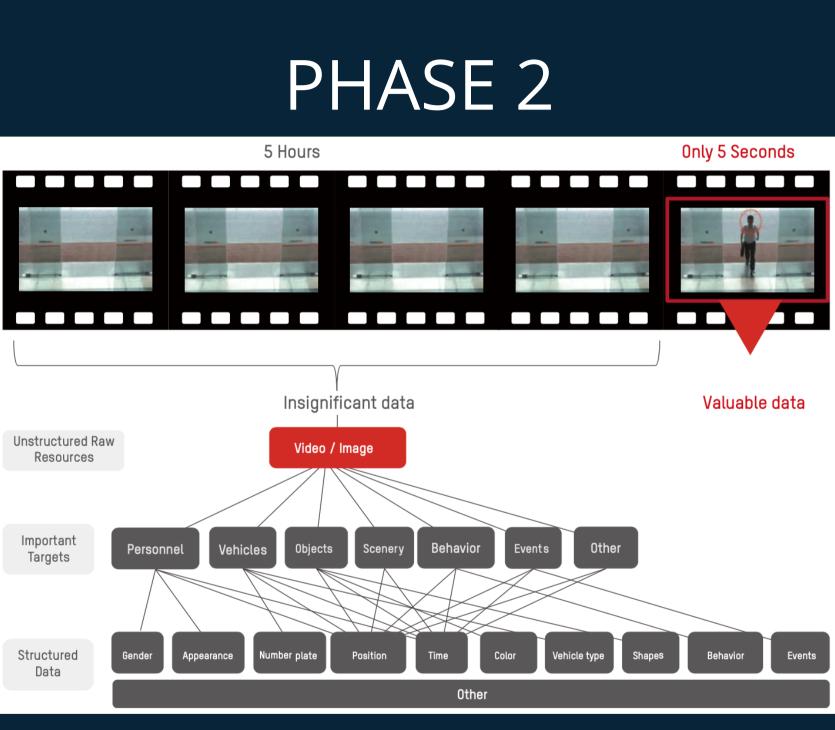






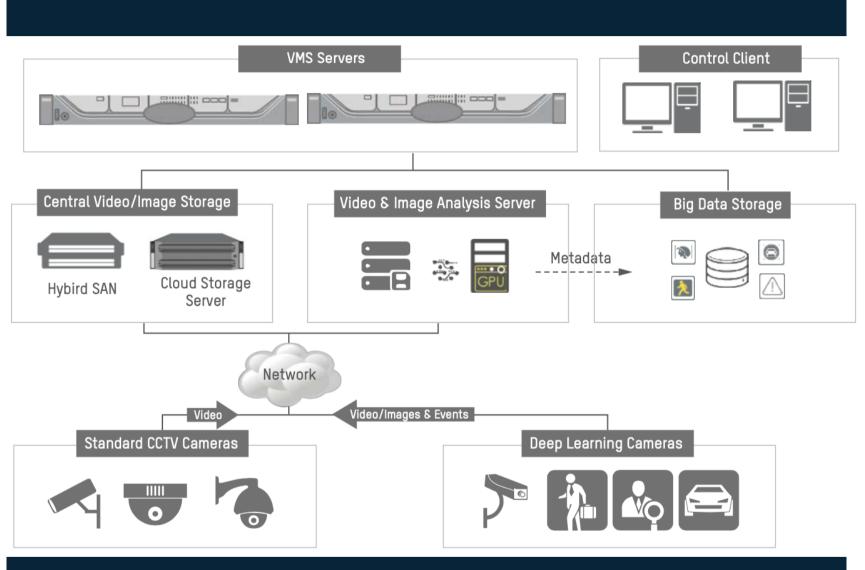
# INTELLIGENT VIDEO SURVEILLANCE

Video analysis applications pave the way for proactive surveillance, which helps your security staff protect property by detecting and deterring crime. Applications can detect humans/vehicles, fire/smoke, or abnormal behavior/conditions and automatically notify security staff.



# DATA FUSION & HIERARCHICAL MANAGEMENT

A well-crafted city surveillance system will deter vandals and prevent security threats, and the best installations go unnoticed by the public at large. Pani provides a series of front-end devices in various applications to provide strategic surveillance and prevent criminal activities. And when events do occur, this Panopticon City Surveillance System significantly improves efficiency for post-event investigation.





PERSON WEARING RED COLOUR

AVLYTICS FOUND

# MACHINE DEEP LEARNING DEVELOPMENT PHASE

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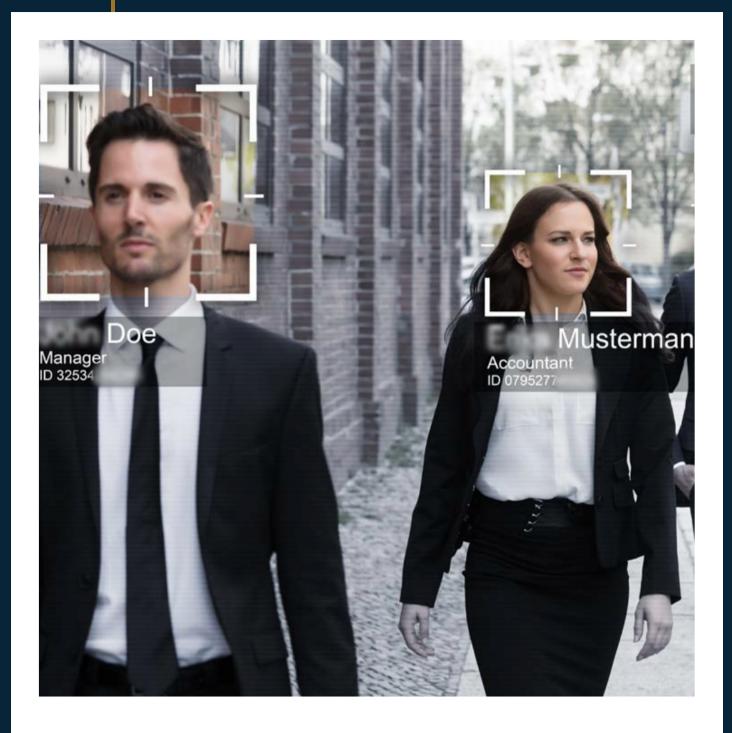
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#### FACIAL RECOGNITION





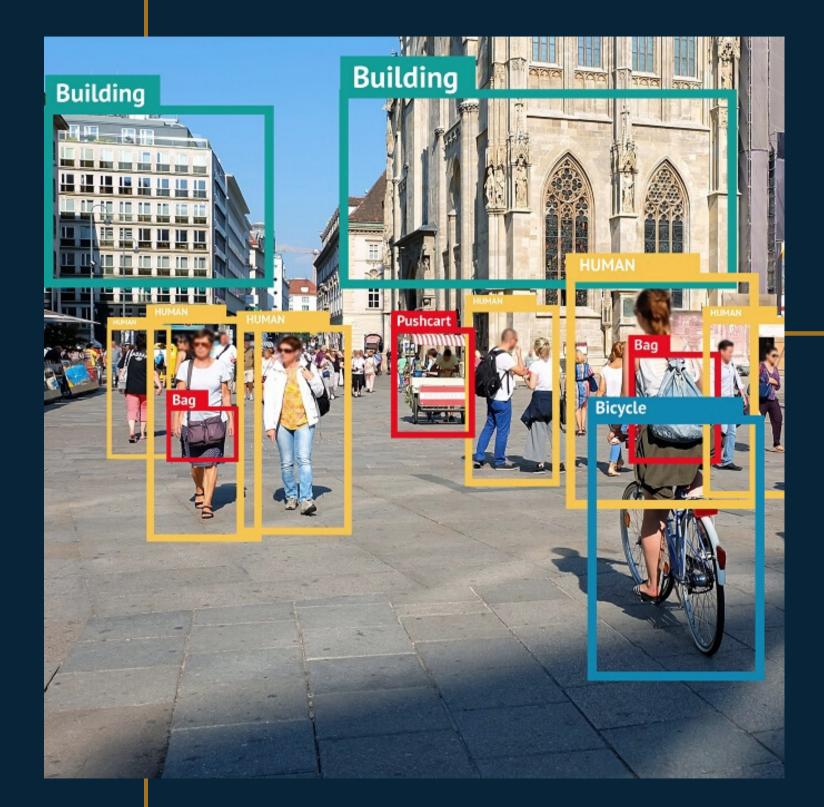
Panopticon optimizes facial recognition algorithms for different countries and regions to achieve higher accuracy rate.

### PEOPLE MANAGEMENT

#### FACIAL RECOGNITION

The system provides accurate facial recognition results thanks to the Hikvision face capture cameras and powerful server

#### **DEEP MACHINE LEARNING**



# BODY CHARACTERISTICS AND ABNORMAL BEHAVIOR

The real-time video analysis algorithm can model an individual's body characteristics using video streams from existing cameras. The back-end analysis server is also equipped with algorithms that can detect abnormal behavior, such as sudden running, wandering, or intrusion, via video streams.

## HIERARCHICAL MANAGEMENT

In addition to establishing a safe city, local administrators prioritize and manage all resources from various cities.

Here's how it happens:

The **Cloud Center** focuses on multidimensional data fusion and big data analysis.

The **Edge Domain** focuses on data storage, intelligent processing, association analyses, and rapid response

The **Edge Node** focuses on multidimensional data collection and front-end intelligence processing.

# THE CLOUD CENTER

Algorithm Integration

## EDGE DOMAIN

Algorithm Integration

# EDGE NODE

Algorithm Integration

### ECOSYSTEM

#### Algorithm Integration

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**TensorFlow** 

**O** PyTorch



**XIS 6 SOLUTIONS** CREATIVE INTELLIGENCE



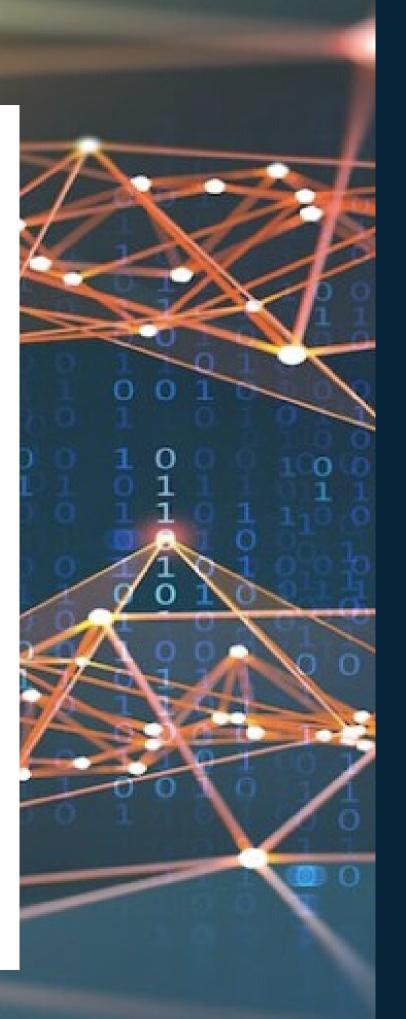


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