

PARTNERS



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SURVANT

SURVEILLANCE
VIDEO ARCHIVES
INVESTIGATION
ASSISTANT



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www.survant-project.eu

THE SURVANT SYSTEM

SURVANT enables end-users, such as police investigators, to automate time-intensive tasks in their work while providing improved situational awareness. SURVANT enables the ingestion of video footage from multiple repositories/sources, including user uploaded content, to correlate and aggregate a complete view of an event under investigation. It facilitates the seamless connection to heterogeneous video repositories, supporting multiple video formats, and the capture of camera positions via geographical co-ordinates. Security and privacy-related provisions for ethical personal data processing are built-in from the ground up, covering all system aspects: repository connections, user access rights, inter-module data transfer and result visualization.

The primary goal of SURVANT is to reduce the burden of time consuming and laborious effort involved in the analysis of surveillance camera footage and thus free up experienced and highly valuable human investigative resources. By bringing state-of-the-art video analytics and automated reasoning techniques to bear, SURVANT can rapidly analyse large volumes of video material across a range of formats. It brings attention to suspicious behaviour patterns and enables queries combining specific types of event, people and object movement across a geographical area.

REAL USE CASES

SURVANT is able to support end-users in their performance of a diverse range of investigations.

A list of candidate cases originating from real events and based on real challenges faced by police forces and crime investigators have been defined. This includes investigations related to the following events:

- Beat & Run Away 
- Pick Pocketing 
- Search for missing persons 
- Building monitoring 
- Recurring criminal behaviour 
- Suspect tracking after a criminal incident 
- Suspicious behaviour of individuals 
- Vandalism, graffiti against public property or vehicles 

This list drives the definition of the real pilots that are used to test and validate the system with the active support of the Madrid Municipal Police, following a user-centred design approach, strongly collaborating with expert investigators.

THE SYSTEM FEATURES

- **Smart Video Analytics** - Deep Learning-based object and event detection and tracking
- **Rich content-based search** - Search for suspects, objects, actions, and events across multiple cameras, by text or example
- **Complex query formulation** - Support for multi-object queries enhanced with reasoning capabilities to enable time, space and logical restrictions
- **Interoperability** - Support for diverse video content, including user uploaded images and videos, from heterogeneous repositories
- **Scalability** - Easily extendable system for analysing growing volumes of video footage
- **GDPR compliance** - Developed with Privacy by Design principles, featuring user management, video anonymization, authorization levels and tiered access to content

With SURVANT, investigators are able to query the system for video segments and images in order to locate unlawful events, pinpoint suspicious behaviours, track people displaying suspicious behaviour, locate incidents of suspicious behaviour and much more.

The analysis of video archives footage enabled by the SURVANT system therefore enables prompt and effective detection of malicious events and suspects in large volumes of video. Traditional investigation practices are dramatically improved in terms of their effectiveness, and time and cost consumption.