huperLab’s Vision-based Intelligent Video Analytics Double Added Value in Taipei Mansion

Intelligent surveillance system secures living environment of mansion in Taipei.

A large scale of mansion with over 400 households and occupied spacious dimension as 6,151.2 M² in Taipei County, is a famous indicative construction regionally. Unlike other areas, this mansion provides a better quality of living environment and ensures its citizens’ safety by full-featured intelligent surveillance system.

Requests of living standard are sharply increasing for modern people nowadays while high quality of security is a part of it as well. To secure more households and entry points, it requires more cameras and a powerful surveillance system to reach better performance. Based on this prerequisite, the well-known solution provider, GCC, chose huperVision surveillance system in the combination of practical intelligent video analytics, like loitering
detection, virtual fence detection, secure zone detection and motion detection, to secure major entry points and building surroundings to upgrade security level other than video viewing and recording available in traditional CCTV systems.

In this case, the full-featured video analytics cover major entry points, including hallways, side entrances, backdoor fences that neighbor on other buildings. With advanced algorithms, these intelligent video analytics can real-time detect and analyze objects in secured areas and further trigger alarms. For example, the loitering detection function covers the hallway of a building to keep an eye on people who walk in and out routinely, and can instantly trigger alarms when suspicious people are loitering for a period of time. Meanwhile, virtual fence and secure zone detections are applied to monitor significant entry points, such as entrances for private use, and backdoor fence neighbored on other constructions, where are only accessed by specific personnel. And major entrances from the 2nd to 4th floors are secured by the motion detection to protect residents’ safety from being bothered by unknown visitors.

In detection areas the function of ignoring smaller/larger objects can filter specific objects, such as dogs and cats, in terms of object size to avoid false alarms for greater precision. And the privacy mask function allows users to mask certain areas in the surveillance video for privacy protection.

“It’s like having virtual eyes!” Project Manager of GCC, Justin Chang says, “We deploy virtual fence detection and secure zone detection at several major entry points for 24hr surveillance and instantly event reports. Also, smart search feature aids the manager in saving much time to locate specific video segments from a huge database. The search results can be displayed in the thumbnail view for instant browse. Security guards no longer spend most of their time walking around the site but check reports when events happen.”

huperCenter, also installed in the mansion, works as a central monitoring and event management station to receive alerts from remote DVR sites, and generate event logs for quick search and archives. All intelligent video analytics can be scheduled by day, by week or by month while event notifications can be sent to users in a more convenient way, such as, by email, by fax, by phone and so on. In this way, security guards only need to export and compile record reports to the management committee regularly, and deal with instant events based on accurate reports nonstop.
The above vision-based intelligent video analytics can easily work through CCTV or network cameras with existing surveillance systems without extra hardware costs. Users enable to opt for key video analytics functions to meet personal demands in multiple applications.

“Efficient workforce relies on efficient surveillance and management systems. huperLab’s various intelligent video analytics enable to overall improve security and surveillance benefits as well as create added value to this indicative mansion,” indicates Chang.

huperLab in Brief

As a professional video surveillance solution provider, and a technology innovator on computer vision, video/audio codec and streaming technology, huperLab offers a wide range of PC-based surveillance systems with full-featured video analytics, and superior video quality. huperLab has devoted to developing comprehensive, easy-to-use, and reliable surveillance products since 1997.

Since 2002, huperLab has pioneered in “Computer Vision” technology development and awarded various patents. Based on proprietary technologies, they lead surveillance system into a new era by providing rich intelligent video analysis, such as people counter, virtual fence detection, face detection, loitering detection and flame detection and so on. With few more years R&D experience ahead of other competitors, huperLab's video analytics technology are getting matured these years. Bundle with huperVision 4000 Series intelligent surveillance software suite, all huperLab products provide powerful video analytics plus hybrid DVR/NVR support. And its huperCenter (CMS) program can instantly notify events and remote surveillance.

In recent years, huperLab further leads computer vision to 3D field. Exclusive 3D video analysis technology along with a state-of-the-art stereo camera enables to capture three-dimensional images based on mimic human vision and count people with much greater precision. By integrated intelligent algorithm, huperEyes 3D Counter further provides distance and height measurements more accuracy since that is less affected by light and shadow variation.

huperEyes 3D Counter, the foremost flagship product of 3D computer vision technology, provides useful information that can further be analyzed for the use of business intelligence. For example, retailers are able to learn their customers’ shopping behavior,
improve customer satisfaction or evaluate store layout based on the information provided by huperEyes 3D Counter.

In the near future, huperLab continuously commits to intelligent surveillance system development as well as integrating various applications, such as POS, GPS, access control, LPR and more. Based on green environment concept, more green elements as eco-friendly and power savings have been added in huperLab’s product lines to provide customers solutions with thinner, smaller, low power but high performance.