

# **Towards Integration of Advanced Video Surveillance Techniques into Enterprise Aware Security Information Management**

Youngchoon Park

Advanced Security Systems' Research  
Johnson Controls, Inc.  
507 East Michigan Street, Milwaukee WI

E-mail: [youngchoon.park@jci.com](mailto:youngchoon.park@jci.com)  
Phone: 414-524-4733

## **ABSTRACT**

In enterprise aware security information management, hardware devices and software applications rarely live in isolation. Networked security sensors (e.g., IP cameras, motion sensors, RFID tags, etc.) are connected via corporate IT infrastructures and security applications are very deeply interconnected with business applications such as ERP, CRM, HVAC and business policy management system. In these integrated solutions, computing becomes more autonomous and less reliant on human input, intervention and administration that are common prerequisites for system integration to support “*ease of use*” and “*ease of integration*”.

In this talk, we will brief common but non-trivial challenges in enterprise aware security system integration projects. More specifically, interoperability requirements among smart video surveillance systems and other security systems and/or business applications are presented. JCI's research results against the challenges are then presented. Proposed solutions include (i) semi-automated discovery of geo-location relationships among facility monitoring sensors, (ii) immersive multi-camera visualization to maximize the usage of screen real estate and to improve location awareness and (iii) false alarm management and system diagnose based on sensor correlations.

We will conclude the talk with missing standards in video surveillance and security industry and desired computing paradigms for large and complex video based security system integration.

## **Bio**

Dr. Youngchoon Park is a head of the advanced security systems' research and development group, and builds few security-related products for Johnson Controls, Inc. Dr. Park has involved in many real-life complex security system designs and deployments. Dr. Park's major research interests are distributed multimedia computing, content-based video processing, enterprise application integration, and cyber-physical system integration. He is a frequent contributor of articles in his area of interests and actively participate many international conferences, standard organizations and workshops. He is the recipient of best software demo award in ACM MM 2000. He is a member of IEEE, and ACM and holds a Ph.D and a M.S from Arizona State University in Computer Science. Dr. Park is also an adjunct faculty member in the CSE department of Wright State University.