A Service-Oriented Architecture for Wireless Video Sensor Networks: Opportunities and Challenges

**ABSTRACT**

Video surveillance is an essential tool for many security-related applications but video is also increasingly used in combination with computer vision technologies in other sensing applications. With the growth of installed camera infrastructure and development it would be beneficial to enable video surveillance systems to support many application simultaneously. Service-oriented Architecture (SoA) is a prospective solution to implement such a multi-application surveillance system, which can provide video data and processing methods to different applications based on their requirements. However, such a system presents several challenges, which needs to be addressed and considered along with the constrains on the system resources. In this paper, we propose a framework for a SoA based video surveillance system with efficient system resource management, including device, data and network management. Our contribution is to present the benefits of such an approach and highlight the research challenges that need to be addressed to realize such a system.

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All are welcome!