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| Altri autori (Persone)  | PalSankar K<br>PetrosinoAlfredo<br>MaddalenaLucia  |
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| Soggetti                | Soft computing<br>Video surveillance<br>Image processing<br>Pattern recognition systems  |
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| Nota di contenuto       | Front Cover; Contents; Preface; About the Editors; List of Contributors; 1. Introduction to Video Surveillance Systems; 2. The Role of Soft Computing in Image Analysis: Rough-Fuzzy Approach; 3. Neural Networks in Video Surveillance: A Perspective View; 4. Video Summarization and Significance of Content: A Review; 5. Background Subtraction for Visual Surveillance: A Fuzzy Approach; 6. Sensor and Data Fusion: Taxonomy, Challenges, and Applications; 7. Independent Viewpoint Silhouette-Based Human Action Modeling and Recognition 8. Clustering for Multi-Perspective Video Analytics: A Soft Computing-Based Approach9. An Unsupervised Video Shot Boundary Detection Technique Using Fuzzy Entropy Estimation of Video Content; 10. Multi-Robot and Multi-Camera Patrolling; 11. A Network of Audio and Video Sensors for Monitoring Large Environments |
| Sommario/riassunto      | Preface Video surveillance is the area of computer science devoted to real-time acquisition, processing, and management of videos coming   |

from cameras installed in public and private areas, in order to automatically understand events happening at the monitored sites, eventually setting up an alarm. Because of the rapidly increasing number of surveillance cameras, it has become a key technology for security and safety, with applications ranging from fight against terrorism and crime, to private and public safety (e.g., in private buildings, transport networks, town centres, schools, and hospitals), and to the efficient management of transport networks and public facilities (e.g., traffic lights and railroad crossings). Video surveillance is an extremely interdisciplinary area, embracing the study of methods and algorithms for computer vision and pattern recognition, but also hardware for sensors and acquisition tools, computer architectures, wired and wireless communication infrastructures, and middleware. From an algorithmical standpoint, the general problem can be broken down into several steps, including motion detection, object classification, tracking, activity understanding, and semantic description, each of which poses its own challenges and hurdles for the system designers. Moreover, the scope of video surveillance is being extended to off-line multimedia analysis systems related to security and safety, thus entailing disciplines such as content-based video retrieval for visual data similarity retrieval and video mining for knowledge extraction; typical applications are in forensic video analysis and human behaviour analysis--

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