
Editorial

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Biographical notes: Sambit Bakshi is presently with the Department of Computer Science and Engineering of the National Institute of Technology Jamshedpur, India. His research interests include biometric systems, cognitive signal acquisition and analysis, and visual surveillance. He has served as the chair of many conferences. He is presently serving as the Organising Chair of the 3rd International Conference on Advanced Computing, Networking, and Informatics 2015, Springer, India. He is the Associate Editor of *International Journal of Biometrics* (2013–). He is a reviewer for many peer-reviewed journals.

Rahul Raman is presently with the Computer Vision Research Lab from the Department of Computer Science and Engineering at the National Institute of Technology Rourkela, India. His area of interest includes image processing and computer vision. He has authored various articles in the domain of biometrics and visual surveillance that includes international conferences, journals and patents. He has served as the chair of many international conferences and served as reviewer to many peer-reviewed journals.

We are happy to present the special issue on ‘Signal processing for visual surveillance’. The divergent and complicated need of providing security at public places demands high-end surveillance systems and visual surveillance share its fair presence towards providing solution to them. This domain deals with the real-time implementation of complicated signal processing algorithms at higher dimensions. The articles presented in this issue widely vary from discussion of underlying theoretic foundations to actual implementation issues. The articles showcased in this issue contributed in *theory*, *practice*, as well as *application* of visual surveillance.

Theory section presents two articles. Stefani et al. put forward a novel confidence interval for mutual information between two joint probability distributions. Kaur et al. propose a fuzzy logic-based cognitive radio channel allocation strategy for secondary users.

Practice section presents two articles. Singh and Jalal propose learning-based automatic trimap generation for image matting. Automatic trimap generation reduces human effort. Tripathi and Jalal propose a method to classify human and non-human objects from a scene and use this method for suspicious object detection.

Application section presents one article. Nambiar et al. present a fully-labelled multi-resolution dataset which serves the purpose of a benchmark dataset for re-identification. Developing such datasets is challenging as the dataset should be manually labelled so that any algorithm can be evaluated against the ground truth.