
Editorial

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Biographical notes: (Winston) Wai-Chi Fang is currently the TSMC Distinguished Chair Professor of the National Chiao Tung University, Taiwan. Since joining JPL in 1985, he has been actively pursuing extensive research and technology work in areas that include VLSI/SoC circuits and systems. He is an IEEE Fellow and was elected as Governor of the IEEE Circuits and Systems Society (CASS). He serves as an officer of IEEE Systems Council as the Vice President with an additional duty as the Chairman of Transnational and Liaison Committee.

Tai-hoon Kim received his MS degrees and PhD in Electric, Electronics and Computer Engineering from the Sungkyunkwan University, Korea. And he got his second PhD in Computer Engineering from the Bristol University, UK. After working with Korea Information Security Agency as a Senior Researcher, he worked at the Defense Security Command (DSC) for about two years. Now, he is currently a Professor at the Sungshin W. University in South Korea, and Visiting Scholar at the UTAS in Australia.

Sabah Mohammed is a Full Professor and a Professional Engineer from the Department of Computer Science and Co-Founder of the Smart Health FabLab at the Lakehead University. His research is focused on intelligent systems. He is an Adjunct Professor from the University of Western Ontario. He is also the Chair of Smart and Connected Health with IEEE ComSoc and the EiC of the IGI Global, *International Journal of Extreme Automation and Connectivity in Healthcare*.

Carlos Ramos graduated in 1986 and received his PhD degree, in 1993 from the University of Porto, Portugal. He is a Coordinator Professor of the Department of Informatics at the ISEP, IPP. His main interests are artificial intelligence and decision support systems, recently with more emphasis on ambient intelligence. He is the Director of GECAD, the largest R&D centre of the polytechnic system in Portugal, and dedicated to AI topics.

Osvaldo Gervasi is a Researcher (INF01) and Aggregate Professor from the Department of Mathematics and Computer Science, Perugia University, since November 2001. He obtained his PhD cum laude in *Quimica Teorica y Computacional* on 22 November 2012 at the Barcelona University, Spain. From May 1986 to January 10, 1988, he got a research contract with the Centro di Calcolo of Perugia University. From January 11, 1988 to October 31, 2001, he got the position of Tecnico Laureato at the Centro di Calcolo of Perugia University, and as the Scientific Area Manager, since 1990.

Adrian Stoica has 30 years of R&D experience in autonomous systems, developing novel adaptive, learning and evolvable hardware techniques and embedding them into electronics and intelligent information systems, for applications ranging from measurement equipment to space avionics to robotics. He has over 150 papers, seven awarded patents, founded several conferences, roles in IEEE, been a plenary speaker at more than ten international conferences, and member of Board of Governors, IEEE SMC.

1 Introduction

We are very happy to publish this special issue of the *International Journal of Computational Vision and Robotics*.

This issue contains three articles. Achieving such a high quality of papers would have been impossible without the huge work that was undertaken by the editorial board members and external reviewers. We take this opportunity to thank them for their great support and cooperation.

The ‘Crowd detection and counting using a static and dynamic platform: state of the art’ presents a survey on crowd detection and crowd density estimation from moving platform and surveys the different methods employed for this purpose. This review category and delineates several detections and counting estimation methods that have been applied for the examination of scenes from static and moving platforms.

The paper ‘Real time vision-based hand gesture recognition using depth sensor and a stochastic context free grammar’ presents a new algorithm in computer vision for the recognition of hand gestures. In the proposed system, Kinect sensor is used to track and segment hand in the clutter background and feature extracted by finger and an angle between them. Classify the hand posture using multi-class support vector machine. The hand gesture is recognised by stochastic context free grammar (SCFG). SCFG uses syntactic structure analysis and by this method, recognises hand gestures by set of production rules which consists of a combination of hand postures. The proposed algorithm is able to recognise various hand postures in real time with more than 97% accuracy.

In paper ‘Adaptive multi-threshold based de-noising filter for medical image applications’, the proposed work is tested with benchmark images and few medical images. It produces promising result and the results are compared with existing two-stage noise reduction techniques. Popular performance metrics such PSNR and SSIM are used for evaluation. Quantitative analysis and experimental results demonstrate that the proposed method is more efficient and suitable for medical image pre-processing.