

---

## Preface

---

### Francisco Isidro Massetto\*

Federal University of ABC,  
Rua Santa Adélia, 166, Bairro Bangu,  
CEP 09.210-170 Santo André – SP, Brazil  
Email: francisco.massetto@ufabc.edu.br

\*Corresponding author

### Kuan-Chou Lai

National Taichung University of Education,  
No. 140, Minsheng Road, West Dist., Taichung City 40306, Taiwan  
Email: kclai@mail.ntcu.edu.tw

### Chi-Yi Lin

Department of Computer Science and Information Engineering,  
Tamkang University,  
No.151 Yingzhuan Road, Danshui District,  
New Taipei City, 25137, Taiwan  
Email: kclai@ntcu.edu.tw

**Biographical notes:** Francisco Isidro Massetto received his Master in Computer Science from the Federal University of São Carlos (UFSCar) and PhD in Computer Engineering from the University of São Paulo (Poli-USP). Currently, he is an Assistant Professor at the Federal University of ABC, Brazil. His research interests include programming teaching techniques, game development, cloud computing and mobile computing.

Kuan-Chou Lai received his MS in Computer Science and Information Engineering from the National Cheng Kung University in 1991, and PhD in Computer Science and Information Engineering from the National Chiao Tung University in 1996. Currently, he is a Professor in the Department of Computer Science at the National Taichung University of Education, Taiwan. His research interests include cloud computing, data stream processing, parallel processing, system architecture, multimedia systems, and grid computing.

Chi-Yi Lin is an Associate Professor in the Department of Computer Science and Information Engineering at Tamkang University, Taipei, Taiwan. He received his BSc and PhD in Electrical Engineering from National Taiwan University in 1995 and 2003, respectively. He was a Visiting Researcher at AT&T Labs-Research, New Jersey from August to December, 2000, Assistant Researcher at the Telecommunication Labs, Chunghwa Telecom, from 2003 to 2007, and Postdoctoral Research Fellow at National Taiwan University of Science and Technology from 2007 to 2008. His research interests include cloud computing, ubiquitous computing, and networking technologies.

---

The invitation to organise the 4th International Conference on Ubi-media Computing in Brazil was received with joy and demanded huge effort and cooperation among all those involved. The conference organising committee heartily express that all efforts, hard work and meetings are worthwhile. To garland the team's effort, this special issue celebrates the success of this conference. The high quality of submitted manuscripts had an impressive and positive impact on local and global community.

From the perspective of this special issue, it is addressed to invite papers from a wide range of topics in ubiquitous computing. In this special issue, these manuscripts are as follows:

‘An UM-based silhouette-crease edge enhancement for noisy images’, by Shwu-Huey Yen, Tai-Kuang Li, and Chun-Hui Wang, introducing an improved unsharp masking (UM) technique that enhances the quality and suppresses noise for the images acquired from a noisy environment, such as during night time.

‘Cloud networks for sustainable ubiquitous services’, by Stefan Bensch, where the author examined technical and organisational potentials of cloud computing with regard to ubiquitous services in value networks.

‘Context aware middleware in ambient intelligent environments’, by Carlos Filipe Freitas, António Meireles, Lino Figueiredo, João Barroso, António Silva and

Carlos Ramos, presenting a novel ambient for ubiquitous group decision-making and a service reposition in power systems, based on ambient intelligence paradigm.

‘OntoHealth: a system to process ontologies applied to health pervasive environment’, by Giovanni Librelotto, Leandro Freitas, André Fiorin, Bruno Mozzaquatro, Leandro Pasetto, Ricardo Martini, Renato de Azevedo and Rafael Pereira, discussing techniques considering a hospital to be seen as a pervasive environment, where someone, through ubiquitous computing, engages a range of computational devices and systems simultaneously, in the course of ordinary activities, and may not necessarily even be aware that they are doing so

‘3D skeleton construction by multi-view 2D images and 3D model segmentation’, by Joseph C. Tai, Shih-Ming Chang, Shwu-Huey Yen, Timothy K. Shih and Kuan-Ching Li, where the authors combined several techniques for 3D models construction based on use multi-view human images and find the feature points

between difference angles by speeded up robust features (SURF) method. Additionally are used an effective coordinate transformation method to transform feature points in 3D space and improved K-means algorithm which adds three directions to find join points of the human and produce a simple 3D skeleton generated from the information of the human.

As we know, a special issue preparation takes lots of effort both from the editors and from the contributing authors. There are others involved in the entire process, starting from the Editor-in-Chief of the journal to the journal staff who helped us at each step by providing guidelines and tackling technical issues related to the submission system or journal policy. We are grateful to all of them. There are also external reviewers for evaluation of the submitted papers, whom we would like to thank for their invaluable service.

To everyone that gave any kind of contribution on this special issue, our most sincere thank you.