Editorial

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Biographical notes: Balakrishnan Nagaraj is working as a Professor and Head in the Electronics and Communication Engineering Department at Karpagam College of Engineering, India. He worked as an academician for 12 years in various positions. His technical expertise and research interests include a control system, automation, soft computing, and high-speed signal processing. He is a member of various professional bodies like IEEE, MAENG, IACSIT, ISTE and IETE. He is a reviewer for different reputed journals like Elsevier, Wiley, Inderscience etc., and he has been the Guest Editor for few special issues in Hindawi, Elsevier, Inderscience, Springer, etc.

Danilo Pelusi is a Teacher in the Faculties of Communication Sciences and Bioscience and Agro-Food and Environmental Technology. His research is on coding theory and artificial intelligence. He is an Assistant Professor of Computer Science from 2009 to 2012 at the University of Teramo. He has developed research activity on control systems optimisation and database management to the Astronomic Observatory Collurania 'V. Cerulli' of Teramo. He is a member of the PhD board in Epistemology of Informatics and Social Changes (University of Teramo), Administrator of the e-learning platform e-RID of the University of Teramo from 2009 to 2012. He has a PhD in Computational Astrophysics and Guest Editor for Inderscience, Springer.

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The special issue 'Intelligent Computing for the Epidemic Challenges of Biometrics' is collected and prepared on aspects regarding the enhancement of artificial intelligence in the biometrics and the challenges that endured.

Our team has selected 11 relevant papers, focusing on different aspects that provide strong support on managerial lessons across the biometric field, while the authors represent institutions from several countries, such as China, India, Mongolia, and Egypt. These papers represent and address the various factors and challenges to enhance the intelligence in the biometric, which is summarised as follows.

In this current era, biometrics has become the vital piece of technology that is ubiquitous in mobile phones, smart TVs, wearable devices, robots, CCTV cameras, security lockers, etc., this tech has an enormous outlook future that, it is not possible to find 80% smart devices without biometric by 2020. Also, nowadays, the demographic predictions are made with unique features of biometric methods, which may accurately recognise and classifies the person. Usually, the traditional and modern methods of biometric processing involve pre-processing, feature extraction and analysis, pattern matching, and classification. The epidemic challenges in processing the non-linear data or uncertainty natured data in the stages of pre-processing feature analysis, and rating of traditional methods reduces the accomplishment of staging the standards to meet the current requirement.

The intelligent computing method involves soft computing algorithms such as machine learning and optimisation techniques to handle uncertainty. The inventions of deep learning algorithms give a new trend of hope to create a human-like intelligent system to process the pattern recognition and learning, which has its limitations. In which the reduction of miss and false hit maintenance over massive volume data and its reliability towards classification should have priority attention.

The ever-increasing demand for the quintessential biometric system concerning dimension-reduced feature extraction, human-like classification, flexible algorithmic adaptation on new smart hardware is increasing. To encounter these demands, this special issue seeks to bring forward and highlight the epidemic challenges through intelligent computing.

The managing editors of the special issue want to thank the Editor-in-Chief of *International Journal of Biometrics* (*IJBM*), Professor Dr. Khalid Saeed and all the reviewers and authors involved in this journal issue and last but not least to the publisher and management team.