
Introduction

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Biographical notes: A. Surendar is an Assistant Professor at Vignan's Foundation for Science, Technology and Research, India, and pursuing PhD degree in Anna University, Chennai. His research interests include embedded system and bioinformatics. He has published research outcomes in several IEEE conferences and peer-reviewed international journals and has about 30 research publications to his credit. He is Editor of *International Journal of Communication & Computer Technology*, *International Journal of Pharmaceutical Research* and guest editor for many special issues with Inderscience. He is a member of IEEE and ACM.

Usha Rani Nelakuditi received the Doctoral degree (PhD) in the field of Medical Imaging from Jawaharlal Nehru Technological University, Anantapur, India, in 2013. She has published more than 30 research articles in various reputed journals and international conferences. She was the principal investigator for three government funded research projects from various funding agencies like AICTE and DST, Government of India. She is Head of the Electronics and Communications Engineering department since 2013 in Vignan's Foundation for Science, Technology and Research University. Her areas of research include biomedical signal and image processing, VLSI, instrumentation and automation.

It is a great pleasure for us to organise this special issue in *International Journal of Biomedical Engineering and Technology* published by Inderscience Publishers. In recent years, computational bioscience has been at the cusp of significant innovations that guarantee highly affordable, advanced and smarter healthcare facilities for people across the globe. With data science and analytics fields gaining a lot of attention and investment, brighter days lie ahead for bioscience – the seamless and spontaneous combination of biology and computational techniques. Furthermore, clouds are being positioned as best-in-class IT infrastructures for all kinds of biological experimentation, searching, processing, ingestion, storage and visualisation.

This special issue aims to present a variety of related research contributions to empower future biologists and physicians with bioinformatics tools and analysis methods, including technological advancements, newer tools, techniques and tips, best practices, key metrics and healthcare processes. Our objective is to share value-adding contributions from researchers and scholars across the globe, particularly on the significant impacts of the convergence of bioscience and computational methods.

The scope of this special issue focuses on integrating the recent advances in the field of medical applications. The review process for all papers was rigorous and thorough, including peer-reviewing from at least three experts for each paper. A total of 95 papers were submitted for this special issue and after a stringent peer-review process, only 12 papers were selected. Specifically, this special issue discusses the various stages of biomedical problems such as biomedical signal processing, biological image computing, pattern recognition, visualisation and interaction, classification and brain-computer interface. It is wonderful to introduce these special issue papers to the global researchers through *IJBET*.

The guest editors would like to thank all the authors for submitting their manuscripts in this special issue, and also acknowledge the reviewers for their contributions in reviewing the papers and providing constructive comments to the authors. Finally, guest editors would like to specially thank Prof. Nilmini Wickramasinghe (the Editor-in-Chief of *IJBET*) for his great help and support in organising and coordinating the publication of this special issue. Wishing the authors of this special issue a very happy reading.