
Editorial

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Biographical notes: Nishchal K. Verma is an Associate Professor at the Department of Electrical Engineering, IIT Kanpur. His research interests include intelligent agents and their applications, machine learning algorithms, bioinformatics, intelligent informatics, fuzzy controllers, image frame generation and brain computer/machine interface. He is the recipient of Devendra Shukla Young Faculty Research Fellowship from IIT Kanpur for year 2013-16. He is an IETE Fellow since 2010 and IEEE senior member since 2012. He is Chairman, IEEE UP Section Computational Intelligence Society Chapter and Secretary, IEEE UP Section. He is an Associate Editor for *Transactions of the Institute of Measurement and Control*, UK.

It has been an honour to be the guest editor for this special issue of *International Journal of Computational Vision and Robotics* on ‘intelligent informatics’. The present age can be described as an age of immense data. With cheap storage options, cloud computing, security measures by CCTV recordings, video streaming, etc., we see the volume of data to rise exponentially. We may have a lot of data, but what we are generally interested in is the information contained in it. Formally, much of data analysis was manually done using statistical and other conventional tools. As volume and dimensionality of data increases, continuing the data analysis in similar fashion does not remain feasible any more.

Data mining involves a set of algorithms, techniques and processes that are used to obtain information from raw data. Knowledge, on the other hand, is achieved when trend of the information is observed over some duration. This brings out the need for having a whole new field of algorithms and techniques that mine knowledge from data procured over long duration, which is referred to as informatics. Informatics generally involves the following processes, namely data collection, data pre-processing, data/dimensionality reduction, data saliency and finally, the regression and classification. When intelligent agents are used for any of these processes, the field of algorithms and techniques is then known as intelligent informatics.

This discipline of intelligent informatics is not only useful from application perspective, but also in research. Traditionally, research was either done with pen and paper and/or by performing experiments followed by analysis of results. Over the last three decades, computers’ involvement in performing normal operations, experimentation and research has been ever-increasing. With so many CAD tools, almost everything can be simulated. Also with the help of advanced equipment, all experiment measurements can be brought onto a computer in some measure. It is well seen that fields like bioinformatics, which deal with large amounts of complex data, are relying more and more on informatics.

Being an interdisciplinary field, this special issue may attract a large audience containing researchers and engineers of various fields. All papers have gone through a thorough review process where each paper was reviewed by at least three researchers in that field. Many papers were submitted, of which five papers have been finally accepted to be included in this issue. We sincerely believe that readers will be greatly benefited from these high quality technical literatures.

I, on behalf of the journal, thank all the authors for putting sincere effort in preparing their manuscripts. I wish to express my heartfelt thanks to all the reviewers for giving their time in the review process. My sincere thanks to all members of the editorial board for their unlimited support.