Editorial

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Biographical notes: Mohamed Elhoseny is currently an Assistant Professor at the Faculty of Computers and Information, Mansoura University. He is an ACM distinguished speaker and IEEE senior member. Collectively, he authored/co-authored over 100 ISI journal articles in high-ranked and prestigious journals. Besides, he authored/edited 17 international books. He serves as the Editor-in-Chief of *International Journal of Smart Sensor Technologies and Applications*. Moreover, he is an Associate Editor of many journals such as *IEEE Journal of Biomedical and Health Informatics*, *IEEE Access, Scientific Reports, IEEE Future Directions, Remote Sensing*, and *International Journal of E-services and Mobile Applications*.

Xiaohui Yuan received his BS in Electrical Engineering from the Hefei University of Technology, Hefei, China in 1996 and PhD in Computer Science from the Tulane University, USA in 2004. He is currently an Associate Professor at the Department of Computer Science and Engineering in the University of North Texas. His research interests include computer vision, data mining, machine learning, and artificial intelligence. His research findings have been reported in over 100 peer-reviewed papers. He is a recipient of Ralph E. Powe Junior Faculty Enhancement Award in 2008 and Air Force Summer Faculty Fellowship in 2011, 2012, and 2013.

This is a special issue of the *International Journal of Web and Grid Services (IJWGS)*, covering the recent service platforms in grid computing and the related future research directions.

Grid computing has received a significant and sustained research interest in terms of designing and deploying large-scale and high-performance computation in e-science and businesses. Although the advantages of grid computing for classes of applications have been acknowledged, research in a variety of disciplines is needed to broaden the applicability and scope of the current body of knowledge.

Grid computing enables the sharing of distributed computing and data resources such as processing, networking and storage capacity to create a cohesive resource environment for executing distributed applications in service-oriented computing. Grid computing represents a more business-oriented orchestration of homogeneous and powerful distributed computing resources to optimise the execution of time-consuming processes as well. In the grid computing model, servers or personal computers run independent tasks and are loosely linked by the internet or low-speed networks. Computers may connect directly or via scheduling systems.

The accepted papers explore diverse approaches and a number of novel methods and approaches which are proposed and applied to a wide range of grid computing problems. Totally, seven papers are included in this special issue. The first one proposes 'Unconstrained temporal inconsistency checking of natural language in webpage'. The second paper proposes a new model for 'Energy consumption optimisation based on mobile edge computing in power grid internet of things nodes'. The third paper proposes a new methodology for 'Resource scheduling of information platform for general grid computing framework'. While the fourth paper covers an interesting topic related to 'Green lighting intelligent control system with web services based on back propagation algorithm'. One more paper proposes 'A memory-based task scheduling algorithm for grid computing based on heterogeneous platform and homogeneous tasks'. Besides, 'Distributed data mining in grid computing environment' is discussed in paper number six. Finally, 'Association rules mining in parallel conditional tree based on grid computing inspired partition algorithm' is proposed in the last paper.