EDITORSIAL PREFACE

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IJCINI Vol. 5, No. 1 is a regular issue on cognitive Informatics, abstract intelligence, neural informatics, and cognitive computing. This issue encompasses six research papers on: 1) Perspectives on the Field of Cognitive Informatics and Its Future Development; 2) Time and Frequency Analysis of Particle Swarm Trajectories for Cognitive Machines; 3) Cognitive Memory for Semantic Agents Architecture in Robotic Interaction; 4) A Novel Algorithm for Block Encryption of Digital Image Based on Chaos; 5) Towards the Synergy of Cognitive Informatics, Neural Informatics, Brain Informatics, and Cognitive Computing; and 6) Equivalence between LDA/QR and Direct LDA.

The Editor-in-Chief would like to take this opportunity to report that the 2011 IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI*CC’11), the 10th anniversary of the ICCI series, will be held in Banff, Alberta, Canada during August 18-20, 2011 where ICCI has been inaugurated. Over the last decade, CI and CC have been established as an exciting research field, which has already created and attracted millions of entries over the Internet and related research communities. The theme of ICCI*CC’11 will be on “eBrain and Cognitive Computing”.

Since this event, the IEEE ICCI series will be extended to the Cognitive Informatics and Cognitive Computing (ICCI*CC) series in order to better identify and represent the discipline of CI and CC research as well as engineering and industrial applications.

IJCINI has been indexed in EI, DBLP, PsycINFO, CSAIllumina, CORE, and Google Scholar. IJCINI is well recognized in the fields of computing, artificial intelligence, and computational intelligence, as well as psychology and cognitive science. A number of special issues in IJCINI will be organized on cognitive computing and computational intelligence. Submissions to these special issues in particular, and/or to the regular issues in general, are welcome.

The Editor-in-Chief expects that readers of the International Journal of Cognitive Informatics and Natural Intelligence (IJCINI) will benefit from the papers presented in this issue in order to aware the recent advances in this field. I would like to thank the authors, members of the board of editors, and invited reviewers for their great contributions to this issue. I would like to acknowledge the publisher of IJCINI, IGI Global Publishing, USA, and to thank Mehdi Khosrow-Pour (President of IGI), Jan Travers (Director of Intellectual Property & Contracts), Kristin M. Klinger (Senior Editorial Director) and the editorial staff of IGI, Chris Hrobak, and Jamie Wilson for their excellent professional support.

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Editor-in-Chief
IJCINI
Yingxu Wang is Professor of Cognitive Informatics and Software Engineering, Director of International Center for Cognitive Informatics (ICfCI), and Director of Theoretical and Empirical Software Engineering Research Center (TESERC) at the University of Calgary. He is a Fellow of WIF, a P.Eng of Canada, a senior member of IEEE and ACM, and a member of ISO/IEC JTC1 and the Canadian Advisory Committee (CAC) for ISO. He received a PhD in software engineering from The Nottingham Trent University (UK, 1997) and a BSc in electrical engineering from Shanghai Tiedao University (1983). He has industrial experience since 1972 and has been a full professor since 1994. He was a visiting professor in the Computing Laboratory at Oxford University in 1995, the Department of Computer Science at Stanford University in 2008, and the Berkeley Initiative in Soft Computing (BISC) Lab at University of California, Berkeley in 2008, respectively. He is the Founder and Steering Committee Chair of the annual IEEE International Conference on Cognitive Informatics (ICCI). He is founding Editor-in-Chief of International Journal of Cognitive Informatics and Natural Intelligence (IJCINI), founding Editor-in-Chief of International Journal of Software Science and Computational Intelligence (IJSSCI), Associate Editor of IEEE Trans on System, Man, and Cybernetics (A), and Editor-in-Chief of CRC Book Series in Software Engineering. He is an initiator of a number of cutting-edge research fields such as cognitive informatics, abstract intelligence, denotational mathematics, theoretical software engineering, and built-in tests. He has published over 105 peer reviewed journal papers, 193 peer reviewed full conference papers, and 12 books in cognitive informatics, software engineering, and computational intelligence. He is the recipient of dozens international awards on academic leadership, outstanding contribution, research achievement, best paper, and teaching in the last 35 years.