EDITORIAL PREFACE

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IJSSCI Vol. 2, No. 4 is a regular issue on cognitive computing and computational intelligence. This issue includes six research papers on: 1) Cognitive Memory: Human Like Memory; 2) Granular Computing & Human-Centricity in Computational Intelligence; 3) Perspectives on Cognitive Computing and Applications; 4) Global Asymptotic Stability of Stochastic Neural Networks with Distributed and Time-Varying Delays; 5) Classifier Ensemble Based Analysis of a Genome-Wide SNP Dataset Concerning Late-Onset Alzheimer Disease; and 6) The Formal Design Models of a Set of Abstract Data Types (ADTs), which is presented in the special column on “Formal Software Design Models, Patterns, and Frameworks.”

The Editor-in-Chief would like to take this opportunity to report that the 9th IEEE International Conference on Cognitive Informatics (ICCI’10) has been successfully held at Tsinghua University, Beijing during July 7-9, 2010. In addition to the main program on cognitive computing, computational intelligence, and neural informatics, a number of special sessions have been organized such as: 1) Information Sensing in Cognitive Systems; 2) Cognitive Data Mining; 3) Symbiotic Computing; 4) Computational Intelligence and Engineering; 5) Spatial Information Cognition; 6) Green Computing; 7) Swarm Intelligence; 8) Cognitive Affective Computing; 9) Cognitive Communications and User Interfaces; 10) Evolutionary Computing; 11) Social eLearning; 12) Intelligent Information Systems; 13) Cognitive Machines; 14) Text Knowledge Acquisition and Reasoning; 15) Energy and Environmental Informatics; 16) Intelligent Pattern Recognition; 17) Decision-theoretic Rough Set Models; and 18) Bioinformatics and Computational Biology. The first two papers included in this issue are extended papers based on the keynotes of Prof. Bernard Widrow (with Juan C. Aragon) and Prof. Witold Pedrycz at ICCI’10. The third paper is a summary of the plenary panel on Cognitive Computing based on position papers contributed from invited panelists who are part of the world’s renowned researchers and scholars in the field of cognitive informatics and cognitive computing.

IJSSCI has been indexed in DBLP and Google Scholar on research papers published in the emerging fields of software science, theoretical software engineering, computational intelligence, and cognitive computing. A number of special issues in IJSSCI will be organized on cognitive computing, software science, and theoretical software engineering. Submissions to these special issues in particular, and/or to the regular issues of IJSSCI in general, are welcome.

The Editor-in-Chief expects that readers of the International Journal of Software Science and Computational Intelligence (IJSSCI) 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 IJSSCI, IGI Global, 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, Jamie Wilson and Chris Hrobak, for their excellent professional support.

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Editor-in-Chief
IJSSCI

Yingxu Wang is professor of cognitive informatics and software engineering, President of International Institute of Cognitive Informatics and Cognitive Computing (IICICC), and Director of Theoretical and Empirical Software Engineering Research Center (TESERCC) 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, in 1997, and a BSc in Electrical Engineering from Shanghai Tiedao University in 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, Dept. 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 Transactions on System, Man, and Cybernetics (Part A), Associate Editor of ASP Journal on Advanced Mathematics and Applications, and Editor-in-Chief of CRC Book Series in Software Engineering. He is the initiator of a number of cutting-edge research fields such as cognitive informatics, denotational mathematics (such as concept algebra, system algebra, real-time process algebra (RTPA), granular algebra, visual semantic algebra, and inference algebra), abstract intelligence, theoretical software engineering, and built-in tests. He has published over 110 peer reviewed journal papers, 200+ peer reviewed full conference papers, and 12 books in cognitive informatics, software engineering, and computational intelligence. He is the recipient of dozens of leadership, research achievement, best paper, and teaching awards in the last 30 years.