**Editorial Preface**

**Yingxu Wang, University of Calgary, Canada**

*IJSSCI* 2(3) is a special issue on Cognitive Agent Systems (CAS) that presents the latest development in software science and computational intelligence for autonomous and distributed agents. This issue includes six research papers on: 1) A General Knowledge Representation Model for the Acquisition of Skills and Concepts; 2) Cognitive Location-Aware Information Retrieval by Agent-based Semantic Matching; 3) Role-Based Autonomic Systems; 4) Combining Ontology with Intelligent Agent to provide Negotiation Service; 5) A High Level Model of a Conscious Embodied Agent; and 6) The Formal Design Model of a Real-Time Operating System (RTOS+): Static and Dynamic Behaviors, 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) will be 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 will be 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.

*IJSSCI* has been indexed in DBLP and Google Scholar on research papers published in the emerging fields of software science, theoretical software engineering, and computational intelligence. 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 Publishing, USA, and to thank Mehdi Khosrow-Pour (President of IGI), Jan Travers (Director of Intellectual Property & Contracts), Kristin M. Klinger (Director of Editorial Content) and the editorial staff of IGI, Chris Hrobak, and Jamie Wilson for their excellent professional support.

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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, 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 (IJCIIN), 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 the initiator of a number of cutting-edge research fields and/or subject areas such as cognitive informatics, cognitive computing, abstract intelligence, denotational mathematics, theoretical software engineering, coordinative work organization theory, cognitive complexity of software, and built-in tests. He has published over 100 peer reviewed journal papers, 200+ peer reviewed 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.