EDITORIAL PREFACE

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IJSSCI Vol. 5, No. 4 is a regular issue on cognitive computing, software science, and computational intelligence. This issue includes five research papers on: 1) Modeling Agent Interactions using Common Ground Knowledge from a Joint Activity Theory Perspective; 2) A Robust P2P Information Sharing System and Its Application to Communication Support in Natural Disasters; 3) Patient-centered Clinical Trials Decision Support using Linked Open Data; 4) Fast Position and Accurate Segmentation Algorithms for Detecting Surface Defects of the Thermal-State; and 5) Cognitive Process of Moral Decision Making for Autonomous Agents.

The Editor-in-Chief would like to take this opportunity to report that the *International Institute of Cognitive Informatics and Cognitive Computing* (ICIC) has formally established (http://www.ucalgary.ca/icic/), which is hosted at University of Calgary, Canada with Prof. Yingxu Wang as the founding president. Key member organizations include Brown University, University of California (Berkeley), University of Calgary, Fudan University, Kyoto University, MIT, University of Rome, Stanford University, University of Toronto, Tsinghua University, and University of Vienna. The *2013 IEEE International Conference on Cognitive Informatics and Cognitive Computing* (ICCI*CC'12) has been held in New York City, USA during July 16-18, 2013. 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 *2014 IEEE International Conference on Cognitive Informatics and Cognitive Computing* (ICCI*CC'14) will be held in London, UK in August, 2014. The theme of ICCI*CC'14 will be on "*Intelligence Revolution*". The ICCI*CC series is fully sponsored by the IEEE Computer Society, IEEE Computational Intelligence Society, and ICIC.

IJSSCI has been indexed in Google Scholar, DBLP, and RG 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*, *computational intelligence*, *software science*, and *theoretical foundations of 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. The EIC would like to thank the authors, members of the board of editors, and invited reviewers for their great contributions to this issue. The EIC would like to acknowledge the publisher of IJSSCI, Ideal Group Global (IGI) Publishing, USA, and the editorial staff for their excellent professional support.

Yingxu Wang
Editor-in-Chief
IJSSCI

Yingxu Wang is professor of denotational mathematics, cognitive informatics, software science, brain science, neuroinformatics, and cognitive computing. He is President of International Institute of Cognitive Informatics and Cognitive Computing (ICIC) and Director of Laboratory for Cognitive Informatics and Cognitive Computing in Dept. of Electrical and Computer Engineering at the University of Calgary. He is a founding Fellow of ICIC, a Fellow of WIF (UK), a P.Eng of Canada, a Senior Member of IEEE and ACM. He received a PhD in Software Engineering from the Nottingham Trent University, UK, and a BSc in Electrical Engineering from Shanghai Tiedao University. He has industrial experience since 1972 and has been a full professor since 1994. He was a visiting professor on sabbatical leaves in the Computing Laboratory at Oxford University in 1995, Dept. of Computer Science at Stanford University in 2008, the Berkeley Initiative in Soft Computing (BISC) Lab at University of California, Berkeley in 2008, and CSAIL at MIT (2012), respectively. He is the founder and steering committee chair of the annual IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI*CC). He is Editor-in-Chiefs of Journal of Advanced Mathematics and Applications *(JAMA),* International Journal of Cognitive Informatics and Natural Intelligence *(IJCINI),* International Journal of Software Science and Computational Intelligence *(IJSSCI), and Associate Editor of* IEEE Trans. on System, Man, and Cybernetics: Systems. *Dr. Wang is the initiator of a few cutting-edge research fields or subject areas such as Denotational Mathematics (i.e., concept algebra, inference algebra, semantic algebra, process algebra, system algebra, granular algebra, visual semantic algebra, and pseudo symbolic differentiation/integration); Cognitive Informatics (its theoretical framework, neuroinformatics, the layered reference model of the brain (LRMB), the mathematical model of consciousness, cognitive learning engine, and the neural circuit theory); Abstract Intelligence (αI, mathematical models of intelligence, theoretical foundations of brain science. cognitive robots); Cognitive Computing (such as cognitive computers, cognitive robots, cognitive agents, cognitive knowledge bases, and cognitive Internet); Software Science (on unified mathematical models and laws of software, cognitive complexity of software, automatic code generators, the coordinative work organization theory, and built-in tests (BITs)); Basic studies in Cognitive Linguistics (such as the cognitive linguistic framework, formal semantics of linguistics, mathematical model of abstract languages, deductive grammar of English, and the cognitive complexity of text comprehension). He has published over 160 peer reviewed journal papers, 230+ peer reviewed conference papers, and 25 books in denotational mathematics, cognitive informatics, cognitive computing, software science, and computational intelligence. He is the recipient of dozens international awards on academic leadership, outstanding contributions, best papers, and teaching in the last three decades.*