EDITORIAL PREFACE

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Cognitive Informatics (CI) is a contemporary multidisciplinary field spanning across computer science, information science, cognitive science, brain science, intelligence science, knowledge science, cognitive linguistics, and cognitive philosophy. *Cognitive Computing* (CC) is a novel paradigm of intelligent computing methodologies and systems based on CI that implements computational intelligence by autonomous inferences and perceptions mimicking the mechanisms of the brain. Over the last decade, CI and CC have been established as an exciting research field, which has created and attracted millions of entries over the Internet and related research communities. Significant research advances, theoretical breakthroughs, and engineering achievements in CI and CC have led to the establishment of the *International Journal of Cognitive Informatics and Natural Intelligence* (IJCINI) since 2007.

IJCINI Vol. 9, No. 3 is a regular issue on cognitive informatics, abstract intelligence, neural informatics, cognitive computing, and computational intelligence. This issue encompasses five original research papers on: 1) *Modeling Self-Efficacy as a Dynamic Cognitive Process with the Computational-Unified Learning Model (C-ULM): Implications for Cognitive Informatics and Cognitive Computing;* 2) *Information Conversion with Intelligence Creation: The Law that Governs the Information Discipline*; 3) *On Mathematical Theories and Cognitive Foundations of Information*; 4) *Hybridization of Social Spiders and Extractions Techniques for Automatic Text Summaries*; and 5) *Mining Conflict Semantic from Drug Dataset for Detecting Drug Conflict*.

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 Harvard University, Stanford University, MIT, Brown University, University of California (Berkeley), University of Calgary, Tsinghua University, Peking University, Fudan University, Kyoto University, University of Rome, University of Toronto, and University of Vienna, etc. The *2015 IEEE 14th International Conference on Cognitive Informatics and Cognitive Computing* (ICCI*CC'15) will be held at Tsinghua University, Beijing, China in July, 2015, which and the entire ICCI*CC series are fully sponsored by the IEEE Computer Society, IEEE Computational Intelligence Society, and ICIC.

IJCINI has been indexed in EI, DBLP, PsycINFO, CSA Illumina, CORE, RG, and Google Scholar. IJCINI is well recognized in the fields of computing, artificial intelligence, and computational intelligence, as well as brain science, psychology, cognitive science, and computational

linguistics. Submissions to IJCINI from multidisciplinary and transdisciplinary authors are welcome.

The Editor-in-Chief would expect that readers of IJCINI 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 IJCINI, Idea Group Global (IGI) Publishing, USA, and the editorial staff for their excellent professional support.

Yingxu Wang
Editor-in-Chief
IJCINI

Yingxu Wang is professor of cognitive informatics, brain science, software science, and denotational mathematics, President of International Institute of Cognitive Informatics and Cognitive Computing (ICIC, http://www.ucalgary.ca/icic/). He is a Fellow of ICIC, a Fellow of WIF (UK), a P.Eng of Canada, and a Senior Member of IEEE and ACM. He was visiting professor (on sabbatical leave) at Oxford University (1995), Stanford University (2008), UC Berkeley (2008), and MIT (2012), respectively. He received a PhD in Computer Science from the Nottingham Trent University in 1998 and has been a full professor since 1994. He is the founder and steering committee chair of the annual IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI*CC) since 2002. He is founding Editor-in-Chief of Int. Journal of Cognitive Informatics & Natural Intelligence, founding Editor-in-Chief of Int. Journal of Software Science & Computational Intelligence, Associate Editor of IEEE Trans. on SMC - Systems, and Editor-in-Chief of Journal of Advanced Mathematics & Applications. Dr. Wang is the initiator of a few cutting-edge research fields such as cognitive informatics, denotational mathematics (concept algebra, process algebra, system algebra, semantic algebra, inference algebra, big data algebra, fuzzy truth algebra, and fuzzy probability algebra, visual semantic algebra, granular algebra), abstract intelligence (αI), mathematical models of the brain, cognitive computing, cognitive learning engines, cognitive knowledge base theory, and basic studies across contemporary disciplines of intelligence science, robotics, knowledge science, computer science, information science, brain science, system science, software science, data science, neuroinformatics, cognitive linguistics, and computational intelligence. He has published 400+ peer reviewed papers and 29 books in aforementioned transdisciplinary fields. He has presented 28 invited keynote speeches in international conferences. He has served as general chairs or program chairs for more than 20 international conferences. He is the recipient of dozens international awards on academic leadership, outstanding contributions, best papers, and teaching in the last three decades. He is the most popular scholar of top publications at University of Calgary in 2014 and 2015 according to RG worldwide stats.