# EDITORIAL PREFACE

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

IJCINI Vol. 8, No. 1 is a regular issue on cognitive Informatics, abstract intelligence, neural informatics, and cognitive computing. This issue encompasses five research papers on: 1) Cognitive Evaluation of Spatial Formalisms: Intuitive Granularities of Overlap Relations; 2) Analysis of Cognitive Load for Bilingual Subjects based on Lexile Measures; 3) Unveiling the Cognitive Mechanisms of Eyes: The Visual Sensor vs. the Perceptive Browser of the Brain; 4) Generating Semantic Annotation of Video for Organizing and Searching Traffic Resources; and 5) Ordering: A Reliable Qualitative Information for the Alignment of Sketch and Metric Maps.

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 12th 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 13th 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 "*From Information Revolution to Intelligence Revolution*". The ICCI*CC series is 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 psychology, cognitive science, and brain science. A number of special issues in IJCINI will be organized on *cognitive computing, neurocomputing,* and *computational intelligence*. Submissions to these special issues in particular, and/or to the regular issues in general, are welcome.

The Editor-in-Chief would expect 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. 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.

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*Yingxu Wang is professor of cognitive informatics and software science, President of International Institute of Cognitive Informatics and Cognitive Computing (ICIC, www.ucalgary.ca/icic/), Director of Laboratory for Cognitive Informatics and Cognitive Computing, and Laboratory for Denotational Mathematics and Software Science at the University of Calgary. He is a Fellow of WIF (UK), a Fellow of ICIC, a P.Eng of Canada, and a Senior Member of IEEE and ACM. He received a PhD in Computer Science 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 at Oxford University (1995), Stanford University (2008), University of California, Berkeley (2008), and 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 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 - Systems, and Editor-in-Chief of Journal of Advanced Mathematics and Applications. Dr. Wang is the initiator of a few cutting-edge research fields such as cognitive informatics (CI, the theoretical framework of CI, neuroinformatics, the logical model of the brain (LMB), the layered reference model of the brain (LRMB), the cognitive model of brain informatics (CMBI), the mathematical model of consciousness, and the cognitive learning engine (CLE)); abstract intelligence; cognitive computing (cognitive computers, cognitive robots, cognitive agents, and the cognitive Internet); denotational mathematics (concept algebra, semantic algebra, behavioral process algebra, system algebra, inference algebra, granular algebra, and visual semantic algebra); software science (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 of languages, semantic algebra, formal semantics of languages, deductive grammar of English, and the cognitive complexity of text comprehension). He has published 400+ peer reviewed papers and 28 books in cognitive informatics, cognitive computing, software science, denotational mathematics, and computational intelligence. He is the recipient of dozens international awards on academic leadership, outstanding contributions, research achievement, best papers, and teaching in the last three decades.*