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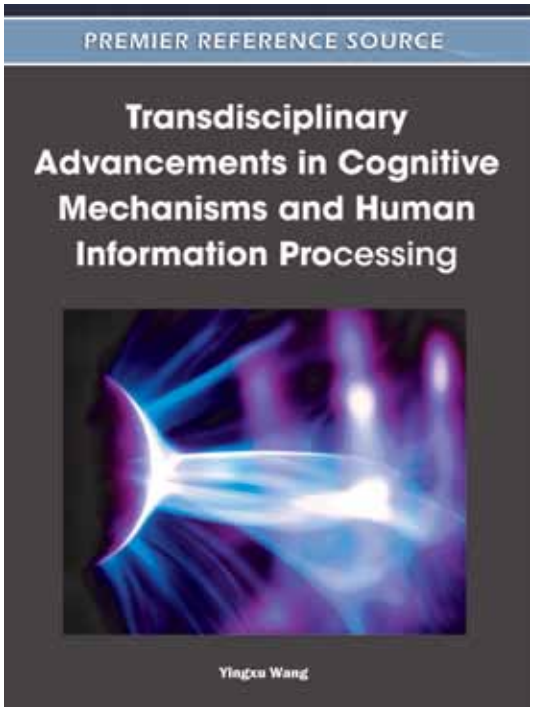
Transdisciplinary Advancements in Cognitive Mechanisms and Human Information Processing



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Yingxu Wang (Univeristy of Calgary, Canada)

Cognitive informatics is a multidisciplinary field that acts as the bridge between natural science and information science. Specifically, it investigates the potential applications of information processing and natural intelligence to science and engineering disciplines.

Transdisciplinary Advancements in Cognitive Mechanisms and Human Information Processing examines innovative research in the emerging, multidisciplinary field of cognitive informatics. Researchers, practitioners and students can benefit from discussions of the connections between natural science and informatics that are investigated in this fundamental collection of cognitive informatics research. This book provides information on the interrelation of the multidisciplinary research area of Cognitive Informatics and the transdisciplinary study of Natural Intelligence.

Topics Covered:

- Agent technologies
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- Perception and consciousness
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Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

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* (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* (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, abstract intelligence, denotational mathematics, cognitive computing, theoretical software engineering, coordinative work organization theory, cognitive complexity of software, and built-in tests. He has published over 105 peer reviewed journal papers, 193 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 30 years. He can be reached at: yingxu@ucalgary.ca.

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