International Journal of Cognitive Informatics and Natural Intelligence

April-June 2012, Vol. 6, No. 2

Table of Contents

EDITORIAL PREFACE

i Yingxu Wang, University of Calgary, Canada

RESEARCH ARTICLES

1 A Neural Dynamic Model Based on Activation Diffusion and a Micro-Explanation for Cognitive Operations

Hui Wei, Fudan University, China

23 The Cognitive Mechanisms and Formal Models of Consciousness

Yingxu Wang, University of Calgary, Canada

41 Image Compression Based on Generalized Principal Components Analysis and Simulated Annealing

Rafael Do Espírito Santo, Instituto Israelita De Pesquisa e Ensino Albert Einstein & Universidade Nove De Julho, Brazil

Fabio Henrique Pereira, Universidade Nove De Julho, Brazil

Edson Amaro Júnior, Instituto Israelita De Pesquisa e Ensino Albert Einstein & University of São Paulo, Brazil

68 The Cognitive Load Affects the Interaction Pattern of Emotion and Working Memory

Xuebing Li, Institute of Psychology of Chinese Academy of Sciences & National Science Library of Chinese Academy of Sciences, China

Zhengzheng Ouyang, Institute of Psychology of Chinese Academy of Sciences & National Science Library of Chinese Academy of Sciences, China

Yue-Jia Luo, Beijing Normal University, China

82 An Acquisition Model of Deep Textual Semantics Based on Human Reading Cognitive Process

Jun Zhang, Shanghai University, China Xiangfeng Luo, Shanghai University, China Lei Lu, Shanghai University, China Weidong Liu, Shanghai University, China