Table of Contents

Cartesian Systemic Emergence: Tackling Underspecified Notions in Incomplete Domains 1
Marta Franova and Yves Kodratoff

Feature Extraction Process with an Adaptive Filter on Brain Signals Motion Intention Classification 7
Luis Felipe Marin-Urias, J. Alejandro Vasquez-Santacruz, Rogelio de J. Portillo-Velez, Felix O. Rivera-Hernandez, and Mario Castelan

The Impact of Human Factors on Digitization: An Eye-tracking Study of OCR Proofreading Strategies 14
Flavia De Simone, Federico Boschetti, Barbara Balbi, Vincenzo Broscritto, Anas Fahad Kahn, Simona Collina, and Roberto Montanari

Strategies for Learning Lexemes Efficiently: A Graph-Based Approach 18
Jean-Marie Poulin, Alexandre Blondin Masse, and Alexsandro Fonseca

Problems of the System Approach to the Study of Psychophysiology of Aesthetic Emotions Concerning an Architecture 24
Olga Chebereva

Image Transformations in a Cognitive System. Tunnel Transition and Combining Ensembles 30
Ekaterina D. Kazimirova

On the Social Aspects of Forming the Concept of "Chef-D'oeuvre" 34
Olga Chernavskaya and Yaroslav Rozhylo

A Conceptual Architecture of Cognitive Electronic Warfare System 38
Qinghan Xiao

Implementing Systemic Thinking for Automatic Schema Matching: An Agent-Based Modeling Approach 43
Hicham Assoudi and Hakim Lounis

Subjective Evaluation on Three Types of Cognitive Load and its Learning Effects 51
Kazuhisa Miwa, Hitoshi Terai, and Kazuaki Kojima

EEG based Valence Recognition using Convolutional Kernel on Time-Frequency Axis 55
Jun-Su Kang and Minho Lee

A Model of Free Will for Artificial Entities 57
Eric Sanchis

A Multilayer Architecture for Cognitive Systems 63
Veronika Thurner and Thorsten Gressling

Human and Machine Capabilities for Place Recognition: a Comparison Study 72
Carlos Alberto Martinez-Miwa, Mario Castelan, Luz Abril Torres-Mendez, and Alejandro Maldonado-Ramirez

NiHA: A Conscious Agent 78
Wajahat Mahmood Qazi, Syed Tanweer Shah Bukhari, Jonathan Andrew Ware, and Atifa Athar