## **Table of Contents**

Invited Keynote Papers	
Finite State Automata by DNA Self-assembly	1
Length Extension Attack on Narrow-Pipe SHA-3 Candidates	į
Review of Knowledge Sharing: Conceptual Foundations for Micro-level Knowledge Sharing and Readiness-for Change Related Behaviours  Dilip Patel, Khalid Samara, and Shushma Patel	11
Inferring Causal Interpretations of Change-Readiness Using Causal-Models: A Knowledge-Based Perspective	27
E-Business, Emerging Trends in the European Union	40
Proceeding Papers	
On Some Cryptographic Properties of the Polynomial Quasigroups $Simona\ Samardjiska$	5.
Some Probabilistic Properties of Quasigroup Processed Strings Useful for Cryptanalysis	6:
A Compositional Method for Deciding Program Termination	7
Practical Consequences of the Aberration of Narrow-Pipe Hash Designs from Ideal Random Functions	8:
Unique and Minimum Distance Decoding of Linear Codes with Reduced Complexity	94
Comparison of the Power Consumption of the 2nd Round SHA-3 Candidates	10
Benedikt Westermann, Danilo Gligoroski, and Svein Knapskog	



Self-heating Effects in High Performance Devices	114
Performance Analysis of Dual-Hop MIMO Systems	123
Parallel Machine Translation for gLite Based Grid Infrastructures Miloš Stolić and Anastas Mišev	133
e-Consumer Online Behavior: A Basis for Obtaining e-Commerce Performance Metrics	142
e-Government and e-Business in Western Balkans 2010	152
Information Brokering with Social Networks Analysis Jorge Marx Gómez and Peter Cissek	166
A Distributed Catalog for Digitized Cultural Heritage	176
Toward an Integration Technology Selection Model for Information Systems Integration in Supply Chains	187
Development of an English-Macedonian Machine Readable Dictionary by Using Parallel Corpora	195
Information Retrieval Using a Macedonian Test Collection for Question Answering	205
A Modeling Framework for Performance Analysis of P2P Live Video Streaming Systems	215
Correlation between Object-oriented Metrics and Refactoring  Daniela Boshnakoska and Anastas Mišev	226
Mobile Robot Environment Learning and Localization Using Active Perception	236

Table of Contents	XIII
Diatom Classification with Novel Bell Based Classification Algorithm Andreja Naumoski and Kosta Mitreski	245
Organizations Analysis with Complex Network Theory  Todorka Banova, Igor Mishkovski, Dimitar Trajanov, and Ljupco Kocarev	255
An Agglomerative Clustering Technique Based on a Global Similarity  Metric	266
Accelerating Clustering Coefficient Calculations on a GPU Using OPENCL	276
Selective Attack in Virus Propagation Processes	286
Object Recognition Based on Local Features Using Camera – Equipped Mobile Phone	296
HDL IP Cores Search Engine Based on Semantic Web Technologies Vladimir Zdraveski, Milos Jovanovik, Riste Stojanov, and Dimitar Trajanov	306
Monitoring Wireless Sensor Network System Based on Classification of Adopted Supervised Growing Neural Gas Algorithm	316
Assessing the Performance of Assembly Tools on Simulated Sequencing Data and Their Sensitivity to GC Content	325
Durkin's Propagation Model Based on Triangular Irregular Network Terrain	333
An Enhanced Visualization Ontology for a Better Representation of the Visualization Process	342
Framework to Design a Business Intelligence Solution	348

## XIV Table of Contents

A New Methodology to Benchmark Sophistication of e-Invoicing and e-Ordering	358
ASGRT-Automated Report Generation System	369
Author Index	377