

# WSEAS Transactions on Information Science and Applications

Contents: 2013  
Print ISSN: 1790-0832  
E-ISSN: 2224-3402

**Acceptance Rate (for the years 2013 and 2014): 13.07%**

Acceptance Rate =  $C/D$  where: C = the number of accepted papers, D= the number of submitted papers. Withdrawn Papers are not considered for the numbers C and D.

## Editorial Board:

### Professor Klimis Ntalianis

Technological Educational Institute of Athens  
Greece  
E-mail: [kntal@image.ntua.gr](mailto:kntal@image.ntua.gr)

### Associate Editors:

Prof. Kleanthis Psarris, The City University of New York, USA  
[URL](#), Email: [KPsarris@brooklyn.cuny.edu](mailto:KPsarris@brooklyn.cuny.edu)

Prof. Jain-Shing Wu, National Sun Yat-Sen University, Kaohsiung, Taiwan  
[URL](#), Email: [wujs@cse.nsysu.edu.tw](mailto:wujs@cse.nsysu.edu.tw)

Prof. Josip Music, University of Split, Croatia  
[URL](#), Email: [jmusic@fesb.hr](mailto:jmusic@fesb.hr)

Prof. Maurice Margenstern, Université de Lorraine, France  
[URL](#) and [URL](#), Email: [maurice.margenstern@univ-lorraine.fr](mailto:maurice.margenstern@univ-lorraine.fr)

Prof. Manuela Panoiu, University Politehnika Timisoara, Timisoara, Romania  
[URL](#), Email: [m.panoiu@fih.upt.ro](mailto:m.panoiu@fih.upt.ro)

Prof. Eleonora Catsigeras, University de La Republica, Uruguay  
[URL](#), Email: [eleonora@fing.edu.uy](mailto:eleonora@fing.edu.uy)

Prof. Claudio Talarico, Gonzaga University, Spokane, WA, USA  
[URL](#), Email: [talarico@gonzaga.edu](mailto:talarico@gonzaga.edu)

Prof. Zhuo Li, Beijing University of Technology, Beijing, China  
[URL](#), Email: [zhuoli@bjut.edu.cn](mailto:zhuoli@bjut.edu.cn)

Prof. Pavel Varacha, Tomas Bata University in Zlin, Czech Republic  
[URL](#), Email: [varacha@fai.utb.cz](mailto:varacha@fai.utb.cz)

Prof. Charles Suffel, Stevens Institute of Technology, Hoboken, NJ, USA

[URL](#), Email: [csuffel@stevens.edu](mailto:csuffel@stevens.edu)

Prof. Shuliang Li, The University of Westminster, London, UK

[URL](#), Email: [S.Li05@westminster.ac.uk](mailto:S.Li05@westminster.ac.uk)

Prof. Constantin Popescu, Oradea University, Oradea, Romania

[URL](#), Email: [cpopescu@uoradea.ro](mailto:cpopescu@uoradea.ro)

Prof. Kun Chang Lee, Sungkyunkwan University, Korea

[URL](#), Email: [leekc@skku.edu](mailto:leekc@skku.edu)

#### **Topics:**

Embedded systems Firmware for electric motors Microprocessor programming for control of electric motors Computer Languages and Applications Information Theory and Applications Complexity Theory and Applications Computing Theory and Applications Software Engineering Web-Based Engineering Web-Based Government Web-Based Commerce Data Structures and Web Applications File Structures and Design Data Bases and Web Applications Knowledge Engineering and Data Technology File Structures for on-line Systems Operating Systems and Internet Parallel and Distributed Systems Algorithms. Internet Computing. Mobile Computing Object-Oriented Programming Computer Architecture Computer Packaging Fault Tolerance Computing Parallel Programming Microprocessors and microcomputers Numerical Analysis Game Theory Operations Research Optimization Techniques Soft Computing Industrial Applications of Informatics and Real Time Systems Multimedia Simulation Virtual Reality Computer Graphics Computational Geometry Machine Vision Computer Algebra Symbolic Computation Pattern Analysis Simulation Machine Intelligence Adaptive and Learning Systems Classification Identification Analysis and design tools Emulation Visualization Digital Libraries Libraries' categorization Hardware Engineering Programming Techniques in Communications Networks Security Anti-hacking techniques Evaluation of commercial software Software Maintenance

## Articles:

### [A Comparative Study of Hierarchical ANFIS and ANN in Predicting Student Academic Performance](#)

Authors: Quang Hung Do, Jeng-Fung Chen

### [An Improved Energy Efficient Intrusion Detection System for False Misbehavior Elimination in Wireless Sensor Networks](#)

Authors: A. Babu Karuppiah, S. Rajaram

### [Similarity Measurement Method between Two Songs by Using the Conditional Euclidean Distance](#)

Authors: Min Woo Park, Eui Chul Lee

### [Certain Investigations on Drowsiness Alert system based on Heart Rate Variability using LabVIEW](#)

Authors: R. Sukanesh, S. Vijayprasath

### [Camera Self-Calibration with Varying Parameters from Two Views](#)

Authors: Nabil El Akkad, Mostafa Merras, Abderrahim Saaidi, Khalid Satori

### [Design of Traditional/Hybrid Software Project Tracking Technique: State Space Approach](#)

Authors: Manoj Kumar Tyagi, Srinivasan M., L. S. S. Reddy

### [A Novel Algorithm for Source Localization Based on NonnegativeMatrix Factorization using \$\alpha\beta\$ -Divergence in Cochleagram](#)

Authors: M. E. Abd El Aziz, Wael Khedr

### [Modified Group Decision Algorithm for Performance Appraisal of Indian Premier League Cricketers](#)

Authors: Pabitra Kumar Dey, Dipendra Nath Ghosh, Abhoy Chand Mondal

### [Generating C++ Log File Analyzers](#)

Authors: Ilse Leal-Aulenbacher, James H. Andrews

### [Experimental Analysis and Implementation of Bit Level Permutation Instructions for Embedded Security](#)

Authors: Gaurav Bansod, Aman Gupta, Arunika Ghosh, Gajraj Bishnoi, Chitrangdha Sawhney, Harshita Ankit

### [IT-Integrated Design Collaboration Engagement Model for Interface Innovations](#)

Authors: Naeimeh Delavari, Rahinah Ibrahim, Normahdiah S. Said, Muhamad Taufik Abdullah

### [Cache Access Pattern Based Algorithm for Performance Improvement of Cache Memory Management](#)

Authors: Reetu Gupta, Urmila Shrawankar

### [Determining the Type of Long Bone Fractures in X-Ray Images](#)

Authors: Mahmoud Al-Ayyoub, Duha Al-Zghool

[An Optimization of a Planning Information System Using Fuzzy Inference System and Adaptive Neuro-Fuzzy Inference System](#)

Authors: Bikram Pal Kaur, Himanshu Aggarwal

[Publishing RDF from Relational Database Based on D2R Improvement](#)

Authors: Ying Chen, Xiaoming Zhao, Shiqing Zhang

[Efficient Framework Architecture for Improved Tuning Time and Normalized Tuning Time](#)

Authors: J. Andrews, T. Sasikala

[A New Hybrid Algorithm for the Multiple-Choice Multi-Dimensional Knapsack Problem](#)

Authors: Mahmoud Zennaki

[Privacy Preservation and Enhanced Utility in Search Log Publishing](#)

Authors: S. Belinsha, A. P. V. Raghavendra

[Extended Asynchronous SN P Systems for Solving Sentiment Clustering of Customer Reviews in E-commerce Websites](#)

Authors: Xue Bai, Xiyu Liu

[Person Authentication System with Quality Analysis of Multimodal Biometrics](#)

Authors: A. Annis Fathima, S. Vasuhi, Teena Mary Treesa, N. T. Naresh Babu, V. Vaidehi

[Methodology and Toolset for Model Verification, Hardware/Software Co-Simulation, Performance Optimisation and Customisable Source-Code Generation](#)

Authors: M. Berger, J. Soler, L. Brewka, H. Yu, M. Tsagkaropoulos, Y. Leclerc, C. Olma

[Optimized Routing for Sensor Networks using Wireless Broadcast Advantage](#)

Authors: Jasmine Norman

[An Effective Visualization Method for Large-Scale Terrain Dataset](#)

Authors: Hang Qiu, Lei-Ting Chen, Guo-Ping Qiu, Hao Yang

[A New Approach for Knowledge Management and Optimization using an Open Source Repository](#)

Authors: Giulio Concas, Filippo Eros Pani, Maria Ilaria Lunesu

[Partitioning of State-Space with the Sum-of-Digits and Hashing with Reduced Number of Address Collision](#)

Authors: Eleazar Jimenez Serrano

[Toward Real-world Activity Recognition: An SVM Based System Using Fuzzy Directional Features](#)

Authors: Samy Sadek, Ayoub Al-Hamadi, Bernd Michaelis

[A New Supervised Dimensionality Reduction Algorithm Using Linear Discriminant Analysis and Locality Preserving Projection](#)

Authors: Di Zhang, Yun Zhao, Minghui Du

[An Evaluation of Teaching Performance: The Fuzzy AHP and Comprehensive Evaluation Approach](#)

Authors: Quang Hung Do, Jeng-Fung Chen

[High Precision Cohesion Metric](#)

Authors: N. Kayarvizhy, S. Kanmani, R.V. Uthariaraj

[A Novel Algorithm for SOA-based Cross-Layer QoS Support in Multiservice Heterogeneous Environments](#)

Authors: Gordana Gardasevic, Dejan Stjepanovic, Aleksandar Damljanovic, Dejan Cvijanovic

[Analysis of Unmanned Aerial Vehicle MIMO Channel Capacity Based on Aircraft Attitude](#)

Authors: Xijun Gao, Zili Chen, Yongjiang Hu

[Applying an Integrated Fuzzy MCDM Method to Select Hub Location for Global Shipping Carrier-Based Logistics Service Providers](#)

Authors: Ji-Feng Ding

[Design of UAV Flight Simulation Software Based on Simulation Training Method](#)

Authors: Chao Yun, Xiaomin Li

[A Risk Perception Analysis on the Use of Electronic Payment Systems by Young Adult](#)

Authors: Noor Raihan Ab Hamid, Aw Yoke Cheng

[E-Learning Developing Using Ontological Engineering](#)

Authors: Sarma Cakula, Abdel-Badeeh M. Salem

[A Review of Lean-Kanban Approaches in the Software Development](#)

Authors: Erika Corona, Filippo Eros Pani