

UKSim 3rd European Modelling Symposium
EMS2009

On Computer Modelling and Simulation

25 – 27 November, Athens, Greece

Published by IEEE Computer Society, Conference Publication Services

Hosted by: City Unity College/City University of Seattle in Greece

Conference Chair

Sokratis Katsikas, University of Piraeus

Conference Co-Chair

Athanasios Pantelous, University of Liverpool

Program Chair

Ioannis Koukos, Hellenic Naval Academy

Program Co-Chair

Theodoros Kostis, University of the Aegean

Local Arrangements Chair

Theodoros Kostis, University of the Aegean

Co-Chairs

Mary Podogyrou, City Unity College
Athanasios Goudosis, University of the Aegean

EMS2009

European Modelling Symposium 2009

25 – 27 November 2009, Athens, Greece

Conference Schedule

and Abstracts of Presented Papers

Conference Schedule at a Glance

Pages 3 – 10

Conference Schedule and Abstracts of Presented Papers

Pages 10 - 18

EMS2009 Conference Schedule at a Glance

Day-0: Tuesday 24 November 2009

4.30: Desk opens for early Registration

6.30: Welcome party

<p>Session Code: Thu.pm1.B ←</p> <p>Day: Wed, Thu, Fri Time: am1, am2, pm1, pm2 Room: A, B, C</p>	<p>Paper Code: see following pages for a full list:</p> <p>Track: A, B, C . . . → B3 ← paper number within track</p>
---	---

Time	Day-1: Wednesday 25 November 2009 (1 keynotes + 32 papers)		
9 – 10.30	Room A: Opening Session and Keynote Speaker 1		
10.30 -11	Refreshment Break		
	Room A	Room B	Room C
11 – 12	Wed.am2.A: C1, C2, C3	Wed.am2.B: A3, A6, A7	Wed.am2.C: D4, D6, E1
12.00-1.10	Lunch		
1.10- 2.50	Wed.pm1.A: A8, A12, A13, A14	Wed.pm1.B: C5, C6, C7	Wed.pm1.C: G1, G2, G3, G5
2.50 -3.20	Refreshment Break		
3.20-5.00	Wed.pm2.A: B3, B4, B5, B7	Wed.pm2.B: F1, F2, F5, F10	Wed.pm2.C: J1, J2, J3, J4
7.30	Free Time/Dinner at own expense in local restaurants		
Day-2: Thursday 26 November 2009 (1 keynote speaker + 14 papers)			
9 – 10.10	Room A: Keynote Speaker 2		
10.10 – 10.40	Refreshment Break		
10.40-12.20	Thu.am2.A: J6, J7, J8, J9, J10	Thu.am2.B: J11, J12, J13, K2	Thu.am2.C: L1, L2, L3, M1, N1
12.20 – 1.20	Lunch		
2.00-6.00	Social program		
7 - 9	Conference Banquet		
Day-3: Friday 27 November 2009 (1 keynote + 15 papers)			
9 – 10.20	Room A: Final day Announcements & Keynote Speaker 3		
10.20 – 10.50	Refreshment Break		
10.50-12.50	Fri.am2.A: R1, R2, R3, R6, R7	Fri.am2.B: S1, S3, S4, S5, S6	Fri.am2.C: P2, P3, P4, A10, T1
12.50-1	Closing of Conference		
1 - 2	Lunch and Depart		

Paper Codes

Papers to be Presented = 61 + 3 Keynote, Registered papers= 105

Paper Code	Paper EDAS ID	Track and paper title, number of papers published in the track, number of papers to be presented	First Author	Presenter
01-A Intelligent Systems, 14 (8)				
A.1	1569241931	<i>Intelligent Fuzzy Chaotic Control of a Two-Link Rigid Robot Arm</i>	Shima Alizadeh Zanjani	
A.2	1569242729	<i>SOA of Smart City Geospatial Management</i>	Mahmoud Fawzi Al-Hader	
A.3	1569243895	<i>Misuse Detection via a Novel Hybrid System</i>	Ali Foroughifar	Foroughifar
A.4	1569244779	<i>CaDSS: A Framework for Enhancing Decision Making in Pervasive Computing Environment</i>	Amin Saremi	
A.5	1569244869	<i>Implementation of a Prototype for a Conventional Solar Tracking System</i>	Nader N Barsoum	
A.6	1569245346	<i>Particle Swarm Optimisation with Dynamic Spread Factor with Application to Modelling of a Flexible Beam Structure</i>	Siti Fauziah Toha	Toha
A.7	1569245850	<i>Active Vibration Control of a Flexible Plate Structure using Ant System Algorithm</i>	Sabariah Julai	Salleh
A.8	1569245856	<i>PSO-Based Parametric Modelling Of a Thin Plate Structure</i>	Salihatun Md Salleh	Md Salleh
A.9	1569247045	<i>Solving Job Shop Scheduling Problem Using Cellular Learning Automata</i>	Masoud Abdolzadeh	
A.10	1569248101	<i>Multimedia Based Intelligent Content Networking for Future Internet</i>	Deepak D Rao	D Rao
A.11	1569248371	<i>Using Particle Swarm Optimization for Robot Path Planning in Dynamic Environments with Moving Obstacles and Target</i>	Amin Zargar Nasrollahy	
A.12	1569248651	<i>Adaptive Framework and User Preference Modeling for Economy Class Aircraft Passenger Seat</i>	Cheefai Tan	Tan
A.13	1569249143	<i>Perception Estimation of Vehicle Motion</i>	Syed Riaz un Nabi Jafri	Jafri
A.14	1569249243	<i>Intelligent Insulin Infuser</i>	Nivethitha Jayaraj	Jayaraj

02-B Hybrid Intelligent Systems & Hybrid Soft Computing, 9 (4)

B.1	1569241264	<i>An application of Bag Filter control system based on techniques of OPC and Multibus</i>	Chao Pan	
B.2	1569242235	<i>Research on the return policy of two substitutable products with fuzzy demands</i>	Yu Ying	
B.3	1569242555	<i>A Novel Fuzzy Genetic Annealing Classification Approach</i>	Maziyar Baran Pouyan	Foroughifar
B.4	1569242811	<i>A Memetic Evolutionary Approach to Radial Basis Function Networks</i>	Elhamdi Ridha	Ridha
B.5	1569245754	<i>Genetic Algorithm Optimization of Fuzzy Control for Wheelchair Lifting and Balancing</i>	Salmiah Ahmad	Toha
B.6	1569247437	<i>An Efficient Parallel Algorithm for Solving Cryptarithmic Problems: PGA</i>	Gholamali Rahnavard	
B.7	1569247796	<i>Dynamic nonlinear inverse-model based control of a twin rotor system using adaptive neuro-fuzzy inference system</i>	Siti Fauziah Toha	Toha
B.8	1569248125	<i>Intelligent Arrhythmia Detection using Genetic Algorithm and Emphatic SVM (ESVM)</i>	Jalal A. Nasiri	
B.9	1569248161	<i>Emphatic Constraints Support Vector Machines for Multi-class Classification</i>	Mostafa Sabzekar	

03-C Methodologies, Tools and Operations Research, 7 (6)

C.1	1569242489	<i>Translating Security Policy to Executable code for Sandboxing Linux Kernel</i>	Hrushikesh Mohanty	VenkataSwamy
C.2	1569242571	<i>Applying Simulator-defined Radar Countermeasure Systems Techniques to Computer Network Security Issues</i>	Theodoros Georgios Kostis	Kostis
C.3	1569242651	<i>Prioritizing use cases to aid ordering of scenarios</i>	Sapna Ponaraseri Gopinathan	Ponaraseri Gopinathan
C.4	1569242703	<i>Simulating Secure Data Extraction in ETL Processes</i>	Mrunalini M	
C.5	1569243673	<i>Early Behaviour Modelling for Control Systems</i>	Jacob Palczynski	Palczynski
C.6	1569245261	<i>Building Automation Simulator and Control Strategy for Intelligent and Energy Efficient Home</i>	Pavel Kordik	Snorek
C.7	1569249163	<i>Ameliorating Metaheuristic in Optimization Domains</i>	Mamta Madan	Madan

04-D Bio-informatics and Bio-Medical Simulation, 6 (2)

D.1	1569242547	Using Artificial Immune System on Implementation of Intrusion Detection Systems	Aref EshghiShargh	
D.2	1569242637	Total Aberrations Measurement with Using the Mathematical Model of the Eye	Fatemeh Davarinia	
D.3	1569242701	On the parameter inference in chaotic chemical systems	Paola Lecca	
D.4	1569245050	Development of Novel Data Compression Technique for Accelerate DNA Sequences Alignment Based on Smith-Waterman Algorithm	Muhammad Adib Haron	Haron
D.5	1569246873	ECG Arrhythmia Classification with Support Vector Machines and Genetic Algorithm	Jalal A. Nasiri	
D.6	1569252201	Development of a 3D model for packed bed liquid chromatography in micro-columns	Sebastian Schnittert	Schnittert

05-E Discrete Event and Real Time Systems, 1 (1)

E.1	1569249677	Inclusion of Real-Time Java Software in Event Driven Simulations	George J Foster	Foster
------------	------------	--	-----------------	--------

06-F Image, Speech and Signal Processing, 10 (4)

F.1	1569241215	Hexagon-Diamond Grid System for Motion Tracking	Ranjit Singh	Singh
F.2	1569242513	Determination of Ionospheric Total Electron Content (TEC): Phase Measurement Based on Levelling Technique	Mohamad Huzaimy Jusoh	Jusoh
F.3	1569242607	Adaptive Neuro-Fuzzy Inference System for classification of EEG signals using Fractal Dimension	Maryam Vatankhah	
F.4	1569243597	Blind Radial Basis Function Network Equalizer for Digital Communication Channels	Deepak Ranjan Nayak	
F.5	1569243648	Restoration of Fingerprint Images Using Discrete Version of the Topological Derivative	Sekar V	Nedumaran
F.6	1569245723	FPGA Implementation of Feature Extraction and MLP Neural Network Classifier for Farsi Handwritten Digit Recognition	Marzieh Moradi	
F.7	1569245814	A Framework to Design Novel SVD Based Color Image Compression	Satish K Singh	
F.8	1569245816	Wavelet Based Robust Digital Watermarking Technique using Reverse Additive Algorithm (RAA)	Satish K Singh	
F.9	1569248487	High Dimensional Problem Optimization Using Distributed Multi-agent PSO	Jalal A. Nasiri	
F.10	1569249318	Analysis of Breast Cancer Using Image Processing Techniques	Ranjeet Singh Tomar	Tomar

07-G Industry, Business and Management, 6 (4)

G.1	1569241779	<i>Data resampling techniques and specific algorithms applied to a critical industrial classification problem</i>	Marco Vannucci	Vannucci
G.2	1569242681	<i>Positioning of order penetrating point in hybrid MTS/MTO environments</i>	Samira Hemmati	Hemmati
G.3	1569245657	<i>CRM Scorecard Measurement: the case for the Banking Sector in Saudi Arabia</i>	Zahid Ullah	Al-Mudimigh
G.4	1569246177	<i>A Novel ITSM-based Implementation Method to Maintain Software Assets in Order to Sustain Organizational Activities</i>	Mohammad Sharifi	
G.5	1569249059	<i>The effect of a good HR in promoting KM & Innovation in a manufacturing sector – A System Dynamics Approach</i>	Vasanth V.P Kamath	Kamath
G.6	1569249493	<i>Use of SOA 3.0 in Strategic Information System Planning</i>	Atif F Mohammad	

08(H) Human Factors, Social & Economic Sciences, 2

H.1	1569242591	<i>Evaluating the Financial Derivative Risk from the Default Probability</i>	Degong Ma	
H.2	1569243640	<i>Concentration and Aggregation of Small and Medium Enterprises Analyzed through a Novel Paradigm</i>	Marco Remondino	

09-J Engineering: Civil, Mechanical, Chemical, Industrial, Manufacturing and Control, 13 (12)

J.1	1569235929	<i>Ambient User Interfaces to Building Data</i>	Artur Krukowski	Krukowski
J.2	1569239993	<i>A new approach to welders' performance for increasing steel structures' safety via Talent Management</i>	Mohammad Hossein Hajikarimi	Hajikarimi
J.3	1569242501	<i>Comparison Between Single and Dual Laser Pointer Applications in Digital Scanning System</i>	Bagus Arthaya	Arthaya
J.4	1569242585	<i>Comparison of Input Shaping Techniques for Sway Suppression in a Double-Pendulum-Type Overhead Crane</i>	Mohd Ashraf Ahmad	Ahmad
J.5	1569242713	<i>A new hybrid Electromagnetism Algorithm for Job Shop Scheduling</i>	Elham Gilak	
J.6	1569242775	<i>Splitting Scheme for Eulerian-Lagrangian Technique in the Analysis of Particle Conformity to Fluid Flow</i>	Zamani	Zamani
J.7	1569242777	<i>Accuracy and Efficiency Improvements of the Navier Stokes Equation Using Modified Splitting Method</i>	Zamani	Zamani
J.8	1569243811	<i>Thermal Optimization of Electronic Equipment: Form Factor Improvement</i>	Kahar Osman	Zamani
J.9	1569245253	<i>Nonlinear Dynamic Modelling and Analysis of a 3-D Overhead Gantry Crane System with Payload Variation</i>	Raja Mohd Taufika Raja Ismail	Raja Ismail
J.10	1569245655	<i>PID-based Control of a Single-Link Flexible Manipulator in Vertical Motion with Genetic Optimisation</i>	Badrul Aisham Md Zain	Toha
J.11	1569248869	<i>Advances in Medical Education on Surgical Techniques using Satellite Communications</i>	Christos I Papachristos	Tsoukias
J.12	1569249181	<i>On the Sensorial Integration for a Holonic Manufacturing System</i>	Doru Panescu	Varvara
J.13	1569252693	<i>Dynamic Modelling of a Single-Link Flexible Manipulator Using Parametric Techniques with Genetic Algorithms</i>	Badrul Aisham Md Zain	Md Salleh

10-K Energy, Power Generation and Distribution, 9 (1)

K.1	1569242035	Recurrent Wavelet Network with New Initialization and its Application on Short-Term Load Forecasting	Amir Baniamerian	
K.2	1569245449	Energy Efficiency and Power Quality Optimization using A Modified Capacitor Bank: An Industrial Case Study	Majid Ghadimi	Ghadimi
K.3	1569246577	A MOPSO Tri-loop Self Regulated Variable Structure Sliding Mode Self Regulating Coordinated Controller for Tidal Wave Energy Conversion	Adel Sharaf	
K.4	1569246581	A Particle Swarm Optimization Technique (PSO) for Power Filter Design	Adel Elgammal	
K.5	1569246589	Optimal Switched Dynamic Modulated Power Filter Compensator for Radial Distribution System	Adel Elgammal	
K.6	1569246591	Optimal Multi-Incremental Self Regulating Speed Controller for Industrial PMDC Motor Drive Systems	Adel Elgammal	
K.7	1569246593	A MOPSO Self Regulating PID Dynamic Error Driven Controller for Tidal Wave Energy Conversion	Adel Elgammal	
K.8	1569249355	Optimal Self Regulating PID Controller for Coordinated Wind-FC-Diesel Utilization Scheme	Adel Elgammal	
K.9	1569249483	Simulation of a Smart Grid City with Software Agents	Stamatis Karnouskos	

11-L Transport, Logistics, Harbour, Shipping and Marine Simulation, 3 (3)

L.1	1569242299	Material flow planning in cellular manufacturing systems by computer simulation	Fatemeh Ranaiefar	Fattahi Ardakani
L.2	1569248813	A System Dynamics Approach for Capacity Planning and Price Adjustment in a Closed-Loop Supply Chain	Mir Pishvae	Hamed Shakouri
L.3	1569249205	ROV based Acoustic Analysis Approach & NDT of Harbor Concrete Structure	Hedayati	Hedayati

12-M Virtual Reality, Visualization and Computer Games, 1 (1)

M.1	1569245625	Study On Advanced Visualization Tools In Network Monitoring Platform	Doris Wong Hooi Ten	Wong Hooi Ten
------------	------------	--	---------------------	---------------

13-N Parallel and Distributed Architectures and Systems, 1 (1)

N.1	1569252243	Implementation of Linear Network Coding on Parallel Architecture	Nitin Rakesh	Rakesh
------------	------------	--	--------------	--------

14-P Internet Modelling, Semantic Web and Ontologies, 4 (3)

P.1	1569247121	<i>Web services for physics – graphics generator</i>	Eliza Consuela Isbasoiu	
P.2	1569249083	<i>An MDA-based Subsurface Spatial Ontology Modeling for Semantic Sharing</i>	SangHoon Lee	Lee
P.3	1569249129	<i>Relative Ontology Modeling for Relation Inference</i>	Myunggwon Hwang	Hwang
P.4	1569249405	<i>A Web-Based Framework for Distributed Medical Image Processing Using Image Markup Language (IML)</i>	Hamidreza Pooshfam	Pooshfam

15-R Mobile/Ad hoc wireless networks, mobicast, sensor placement, target tracking, 7 (5)

R.1	1569243618	<i>Accurate Timeliness Simulations for Real-Time Wireless Sensor Networks</i>	Jérôme Rousselot	Rousselot
R.2	1569243622	<i>Intelligent Agent Platform and Control Language for Wireless Sensor Networks</i>	Frantisek Zboril	Jan Horáček
R.3	1569245257	<i>Modeling Location Monitoring System Using Directional Antennas</i>	Kathiravan K	Roshan
R.4	1569246447	<i>The Simulation and Analysis of Algorithm RRE and TRRE for Redundant Reader Elimination in RFID System</i>	Zhi-Ying Yang	
R.5	1569248779	<i>Modelling periodic data dissemination in wireless sensor networks</i>	Graham S Williamson	
R.6	1569249133	<i>An Intra wireless communication and remote control mechanism in Vehicular Ad-hoc network (VANET)</i>	Helia Mamdouhi	Mamdouhi
R.7	1569249147	<i>IZM-DSR: A New Zone-disjoint Multi-path Routing Algorithm for Mobile Ad-hoc Networks</i>	Nastoo Taheri Javan	Taheri Javan

16-S Performance Engineering of Computer & Communication Systems, 10 (5)

S.1	1569240142	<i>A Survey of Handoff Performance in Mobile IP</i>	Mohamed Alnas	Alnas
S.2	1569242397	<i>Database Application for Mobile Phone using BREW</i>	Ela Dongre	
S.3	1569243267	<i>Performance Analysis of Multi-carrier DS-CDMA wireless Communication System</i>	Saimoon Amin	Amin
S.4	1569243692	<i>Modelling Finite Buffer Slotted Ring Network Using Matrix Geometric Method</i>	Syed Asif Ali Shah	Shah
S.5	1569246697	<i>Dynamic Policy-Based Routing using Firewall Rules</i>	Kavin Tantipongsakul	Tantipongsakul
S.6	1569247963	<i>Rich media Application Using MPEG-4 LAsER PMSI Technique</i>	Seungwon Song	Song
S.7	1569249329	<i>A Game Theoretic Approach for Quantitative Evaluation of Security by Considering Hackers with Diverse Behaviors</i>	Behzad Moayed	
S.8	1569249415	<i>Performance Analysis of Hybrid CDMA Networks</i>	Hakimeh Purmehdi	
S.9	1569249429	<i>Channel Sharing in Hybrid Sectorized Cellular-Ad Hoc Networks with Coverage-limited Relays</i>	Hakimeh Purmehdi	
S.10	1569249477	<i>A Transmitter Model for Performance Improvement and Interference Mitigation of Multi-User STBC-CDMA System in Correlated MISO Channels</i>	Mehdi Rahmati	

17-T Circuits, Sensors and Devices, 2 (1)

T.1	1569241217	<i>Door Sensor for Automatic Light Switching System</i>	Ranjit Singh	Singh
T.2	1569242548	<i>An Ultra-Low Power Real Time Embedded System for Map Generation Using Ultrasound Sensors</i>	Prabhakar Mishra	