

2013 10th IEEE International Conference on Networking, Sensing and Control

(ICNSC 2013)

**Evry, France
10 – 12 April 2013**



**IEEE Catalog Number: CFP13NSC-PRT
ISBN: 978-1-4673-5198-0**

TABLE OF CONTENTS

FUNCTIONAL SWITCHED H_∞ PROPORTIONAL INTEGRAL OBSERVER APPLIED FOR ROAD BANK AND VEHICLE ROLL ANGLES ESTIMATION	1
<i>L. Menhour, D. Koenig, B. Andrea-Novel</i>	
QUALITY CONTROL SYSTEM FOR RADIOTHERAPY SERVICES	7
<i>A. Allam, S. Oussalah, B. Khiter, S. Ferhat, M. Aftane, B. Hocini</i>	
RELIABLE MPR SELECTION BASED ON LINK LIFETIME-PREDICTION METHOD	11
<i>A. Ouacha, N. Lakki, J. Abbadi, A. Habbani, B. Bouamoud, M. Elkoutbi</i>	
OLSR PROTOCOL ENHANCEMENT THROUGH MOBILITY INTEGRATION	17
<i>A. Ouacha, N. Lakki, J. El Abbadi, A. Habbani, M. El Koutbi</i>	
A DECOUPLED NEURO-SLIDING MODE CONTROLLER WITH ITS APPLICATION TO MULTIMACHINE POWER SYSTEMS	23
<i>A. Abbadi, L. Nezli, D. Boukhetala, H. Houassine</i>	
ES-MAC: ENERGY EFFICIENT SENSOR-MAC PROTOCOL FOR WIRELESS SENSOR NETWORKS	28
<i>S. Siddiqui, S. Ghani</i>	
PREDICTIVE DIRECT TORQUE AND FLUX CONTROL OF AN INDUCTION MOTOR DRIVE FED BY A DIRECT MATRIX CONVERTER WITH REACTIVE POWER MINIMIZATION	34
<i>L. Zakaria, K. Barra</i>	
PARALLEL NUMERICAL OPTIMIZATION FOR FAST ADAPTIVE NONLINEAR MOVING HORIZON ESTIMATION	40
<i>T. Poloni, B. Rohal-Ilkiv, T. Johansen</i>	
A ROBUSTNESS METRIC FOR CASCADING FAILURES BY TARGETED ATTACKS IN POWER NETWORKS	48
<i>Y. Koc, M. Warnier, R. Kooij, F. Brazier</i>	
FUZZY DIRECT TORQUE CONTROLLED PERMANENT MAGNET SYNCHRONOUS, DOUBLY FED AND INDUCTION MOTORS	54
<i>F. Hamidia, A. Larabi, M. Boucherit, A. Abbadi</i>	
HYBRID FLOW SHOP PROBLEM WITH BLOCKING AND MULTI-PRODUCT FAMILIES IN A MARITIME TERMINAL	59
<i>Y. Zhang, X. Liang, W. Li, Y. Zhang</i>	
CONTROL OF A CLASS OF HYBRID SYSTEMS: APPLICATION TO A WATER SUPPLY SYSTEM	65
<i>S. Batis, H. Alla</i>	
SHORT-TERM ENERGY STORAGE FOR WIRELESS SENSOR NETWORKS USING SOLAR ENERGY HARVESTING	71
<i>S. Bader, B. Oelmann</i>	
FAULT DETECTION OF MECHANICAL SYSTEMS WITH INHERENT BACKLASH	77
<i>Y. Tan, Z. Zhou, R. Dong, H. He</i>	
OPTIMAL OPTICAL MOUSE ARRAY FOR ACCURATE MOBILE ROBOT VELOCITY ESTIMATION	83
<i>S. Kim, H. Kim</i>	
MATHEMATICAL MODEL OF PIEZOELECTRIC EJECTION FOR HIGH-POWER LED PHOSPHOR COATING PROCESS	89
<i>Q. Guo, Z. Li, Y. Hu</i>	
SCHEDULING TIMED PETRI NETS WITH A TIME-FEASIBLE REACHABILITY TREE	94
<i>H. Kim, J. Lee, T. Lee</i>	
A LAYERED ARCHITECTURE FOR CONTROL FUNCTIONALITY IMPLEMENTATION IN SMART GRIDS	100
<i>S. Srinivasan, U. Kotta, S. Ramaswamy</i>	
INTEGER PROGRAMMING BASED APPROACH FOR MULTIPLE-TARGETS TRAJECTORY IDENTIFICATION IN WSNS	106
<i>C. Wang, X. Huo, W. Song</i>	
FORMATION CONTROL AND OBSTACLE AVOIDANCE FOR NONHOLONOMIC ROBOTS USING DECENTRALIZED MPC	112
<i>A. Mohammadi, M. Menhaj</i>	

CENTRAL CONTROL OF HEAT PUMPS FOR SMART GRID PURPOSES TESTED ON SINGLE FAMILY HOUSES	118
<i>T. Pedersen, P. Andersen, K. Nielsen</i>	
IMPLEMENTING WIRELESS SENSOR NETWORK APPLICATIONS USING HIERARCHICAL FINITE STATE MACHINES	124
<i>M. Kramer, S. Bader, B. Oelmann</i>	
INTERMISSION-BASED ADAPTIVE STRUCTURE ESTIMATION OF WIRELESS UNDERWATER NETWORKS	130
<i>S. Blouin</i>	
FORCE AND DEFLECTION MODELING OF IPMC FINGERS	136
<i>J. Simpson, R. Lumia, M. Martinez</i>	
ENERGY EFFICIENCY IN PON HOME NETWORK SCENARIOS WITH NETWORK ENHANCED RESIDENTIAL GATEWAYS	141
<i>J. Montalvo, J. Torrijos, J. Xia, Y. Ye</i>	
INTERMISSION-BASED ADAPTIVE STRUCTURE ESTIMATION OF WIRELESS UNDERWATER NETWORKS	146
<i>S. Blouin</i>	
AN ADAPTIVE FUZZY WAVELET NEURAL NETWORK WITH GRADIENT LEARNING ALGORITHM FOR NONLINEAR FUNCTION APPROXIMATION	152
<i>Y. Oysal, S. Yilmaz</i>	
FORMATION FLYING CONTROL VIA ELLIPTICAL VIRTUAL STRUCTURE	158
<i>A. Kahn, J. Marzat, H. Piet-Lahanier</i>	
INLAND NAVIGATION CHANNEL MODEL: APPLICATION TO THE CUINCHY-FONTINETTES REACH	164
<i>E. Duviella, L. Bako, J. Blesa, Y. Bolea, M. Sayed-Mouchaweh, Y. Bolea</i>	
INTELLIGENT LIGHTING CONTROL USING SENSOR NETWORKS	170
<i>A. Schaeper, C. Palazuelos, D. Denteneer, O. Garcia-Morchon</i>	
SAMPLE SIZE REDUCTION IN GROUNDWATER SURVEYS VIA SPARSE DATA ASSIMILATION	176
<i>Z. Hussain, A. Muhammad</i>	
FEATURE EXTRACTION OF ECG SIGNALS IN MERIDIAN SYSTEMS USING WAVELET PACKET TRANSFORM AND CLUSTERING ALGORITHMS	183
<i>H. He, Y. Tan, X. Liu</i>	
ADAPTIVE POWER MANAGEMENT IN MULTI-CHANNEL MULTI-RADIO AD HOC WIRELESS NETWORKS	188
<i>F. Alsalamy, A. Abu-El-Haija</i>	
FLURO-SENSING APPLIED TO DETECTION AND IDENTIFICATION OF HYDROCARBONS IN INLAND WATER: STUDY OF THE IMPACT OF DIFFERENT UV LIGHT SOURCES	193
<i>F. Orobon, V. Posadas, J. Martin, J. Rios, A. Orobio</i>	
AN ANGLE-BASED DISSIMILARITY FOR ACCELERATING THE CLUSTERING OF DYNAMIC DATA IN NETWORKS	199
<i>C. Zhou, Q. Zhao, R. Yuan</i>	
COLLABORATIVE OPTIMIZATION OF PRODUCTION AND ENERGY PERFORMANCE IN THE COAL BLENDING MANAGEMENT	205
<i>J. Zhu, F. Qiao, L. Li</i>	
MODELING AND CONSTRAINED CONTROL OF TRANSPORTATION NETWORK	210
<i>H. Zhou, R. Bouyekhf, A. Moudni</i>	
THE DESIGN OF MONITORING AND DATA INFRASTRUCTURES – APPLYING A FORWARD-THINKING REFERENCE ARCHITECTURE	216
<i>M. Schroeder, V. Stender, J. Klump, J. Wachter, R. Kunkel</i>	
FABRICATION OF PAPER-BASED LOAD SENSOR BY USING THE MULTI-WALLED CARBON NANOTUBES INK	221
<i>M. Omid, F. Haghirsadat, F. Oroojalian, A. Yadegari, M. Nazarzadeh, M. Choolaei</i>	
ENERGY-EFFICIENT TRANSPORTATION OVER FLOWING WATER	226
<i>M. Burger, B. Schutter</i>	
ENERGY MEASUREMENTS AND EVALUATIONS ON HIGH DATA RATE AND ULTRA LOW POWER WSN NODE	232
<i>N. Zhu, I. O'Connor</i>	

POTENTIAL OF MULTILEVEL SPAM PROTECTION IN THE LIGHT OF CURRENT SPAM TRENDS: SPAM RATIO IS STILL IMPORTANT SO THAT A NEW APPROACH HOW TO COMBINE THE STRENGTH OF GREALISTING AND CONTENT-BASED SEARCH IS PROPOSED	237
<i>T. Sochor, A. Davidova</i>	
TEODOOR – A SPATIAL DATA INFRASTRUCTURE FOR TERRESTRIAL OBSERVATION DATA	242
<i>R. Kunkel, J. Sorg, O. Kolditz, K. Rink, J. Klump, R. Gasche, F. Neidl</i>	
CREATING HUMAN DIGITAL MEMORIES FOR A RICHER RECALL OF LIFE EXPERIENCES	246
<i>C. Dobbins, M. Merabti, P. Fergus, D. Llewellyn-Jones</i>	
PETRI NET-BASED SCHEDULING ANALYSIS OF DUAL-ARM CLUSTER TOOLS SUBJECT TO WAFER REVISITING AND RESIDENCY TIME CONSTRAINTS	252
<i>Y. Qiao, N. Wu, M. Zhou, Q. Dai</i>	
INTERCOMPARISONS BETWEEN EMPIRICAL MODELS WITH DATA FUSION TECHNIQUES FOR MONITORING WATER QUALITY IN A LARGE LAKE	258
<i>N. Chang, B. Vannah</i>	
A QUANTUM EVOLUTIONARY ALGORITHM FOR LANE RESERVATION PROBLEM	264
<i>P. Wu, A. Che, F. Chu</i>	
CONSENSUS OF SECOND-ORDER MULTI-AGENT SYSTEMS WITH TIME DELAYS AND SLOW SWITCHING TOPOLOGY	269
<i>M. Zareh, C. Seatzu, M. Franceschelli</i>	
DESIGN OF TRACING AND TRACKING NETWORK FOR EDUCATIONAL BUILDING UTILIZATION	276
<i>Y. Pang, H. Veeke, G. Lodewijks</i>	
WEEKLY HOME HEALTH CARE LOGISTICS	282
<i>R. Liu, X. Xie, T. Garaix</i>	
TRANSMISSION SLOT ALLOCATION AND SYNCHRONIZATION PROTOCOL FOR ULTRASONIC SENSOR SYSTEMS	288
<i>D. Caicedo, A. Pandharipande</i>	
ROBUST PRODUCTION PLAN WITH PERIODIC ORDER QUANTITY UNDER UNCERTAIN CUMULATIVE DEMANDS	294
<i>R. Guillaume, C. Thierry, P. Zielinski</i>	
ACCURATE PUPIL EXTRACTION ALGORITHM BY USING INTEGRATED METHOD	300
<i>T. Charoenpong, P. Pattapisetwong, T. Chanwimalueang, V. Mahasithiwat</i>	
STATE RECONSTRUCTOR FOR REAL-TIME FREEWAY RAMP METERING	306
<i>H. Majid, H. Abouaissa, D. Jolly, G. Morvan</i>	
DATA LINK LAYER SECURITY PROTOCOLS IN WIRELESS SENSOR NETWORKS: A SURVEY	312
<i>S. Almheiri, H. Alqamzi</i>	
POLYNOMIALLY SOLVABLE CASES FOR SCHEDULING DETERIORATING JOBS WITH REJECTION	318
<i>M. Liu, C. Chu</i>	
DESIGN OF ELEVATOR CONTROL SYSTEMS USING STATECHARTS	322
<i>Y. Huang, J. Chen, S. Lee, Y. Weng</i>	
COMPUTATIONALLY EFFICIENT ALGORITHM FOR SIMULTANEOUS LOCALIZATION AND MAPPING (SLAM)	328
<i>C. Yang, C. Hsu, Y. Wang</i>	
A SURVEY ON REALISTIC MOBILITY MODELS FOR VEHICULAR AD HOC NETWORKS (VANETS)	333
<i>S. Madi, H. Al-Qamzi</i>	
MOTORCYCLE MAXIMAL SAFE SPEED IN CORNERING SITUATION	340
<i>H. Slimi, D. Ichalal, H. Arioui, S. Mammam</i>	
FEATURE SELECTION FOR LEAKS DETECTION AND CHARACTERIZATION IN DIESEL AIR PATH	347
<i>M. Benkaci, G. Hoblos, N. Langlois</i>	
OPTIMIZED ADAPTIVE SLIDING-MODE POSITION CONTROL SYSTEM FOR LINEAR INDUCTION MOTOR DRIVE	355
<i>K. Hsu, H. Chiang, C. Huang, T. Lee</i>	
A SENSOR-DATA ACQUISITION GRID ARCHITECTURE	361
<i>O. Schelen, R. Brannstrom, C. Ahlund</i>	

A NEW MODEL FOR LANE RESERVATION PROBLEM WITH TIME-DEPENDENT TRAVEL TIMES	367
<i>Y. Fang, Z. Zhu, S. Mammari, F. Chu</i>	
BAYESIAN APPROACH TO MULTISENSOR DATA FUSION WITH PRE- AND POST-FILTERING	373
<i>W. Abdulhafiz, A. Khamis</i>	
CLOUD SERVICE-ORIENTED DASHBOARD FOR WORK CELL MANAGEMENT IN RFID-ENABLED UBIQUITOUS MANUFACTURING	379
<i>M. Cheng, R. Zhong, Y. Li, H. Luo, S. Lan, G. Huang</i>	
INFANT CRY CLASSIFICATION INTEGRATED ANC SYSTEM FOR INFANT INCUBATORS	383
<i>L. Liu, K. Kuo, S. Kuo</i>	
DIFFERENTIAL APPROXIMATION ANALYSIS OF JACKSON'S RULE FOR SINGLE-MACHINE SCHEDULING PROBLEM WITH A FIXED NON-AVAILABILITY INTERVAL	388
<i>I. Kacem, A. Nagih, M. Seifaddini</i>	
ON THE AUTOMATIC GENERATION OF THE MINIMALLY RESTRICTIVE LIVENESS ENFORCING SUPERVISORY POLICY FOR MANUFACTURING- AND SERVICE-SYSTEMS MODELED BY A CLASS OF GENERAL FREE CHOICE PETRI NETS	392
<i>S. Chandrasekaran, R. Sreenivas</i>	
TOWARDS SUSTAINABLE SOFTWARE CRITERIA: RESCUE OPERATION AND DISASTER MANAGEMENT SYSTEM MODEL	398
<i>N. Khamis, A. Misfian, R. Noor</i>	
TIME-EFFICIENT STRUCTURE FOR OBSERVER-BASED DIRECT/INDIRECT FUZZY-NEURAL CONTROLLER	404
<i>W. Wang, C. Yang, Y. Chien, T. Lee</i>	
AUGMENTED REALITY FOR UNDERWATER ACTIVITIES WITH THE USE OF THE DOLPHYN	409
<i>A. Bellarbi, C. Domingues, S. Otmane, S. Benbelkacem, A. Dinis</i>	
A DYNAMIC LOT SIZING MODEL WITH CARBON EMISSION CONSTRAINT AND MULTI-MODE PRODUCTION: A GENERAL PROPERTY AND A POLYNOMIALLY SOLVABLE CASE	413
<i>Y. Yu, Z. Hong, C. Chu, L. Liang</i>	
GEOMETRIC CONTINUOUS-CURVATURE PATH PLANNING FOR AUTOMATIC PARALLEL PARKING	418
<i>H. Vorobieva, N. Minoiu-Enache, S. Glaser, S. Mammari</i>	
OPTIMAL ROUTING IN FREEWAY NETWORKS VIA SEQUENTIAL LINEAR PROGRAMMING	424
<i>Z. Cong, B. Schutter, R. Babuska</i>	
EXPERIMENTAL STUDY OF THE THERMAL IMPACTS ON WIRELESS SENSOR BATTERIES	430
<i>W. Guo, W. Healy, M. Zhou</i>	
ESTIMATION-BASED VARIABLE NEIGHBORHOOD SEARCH APPROACH FOR A PROBABILISTIC ROUTING PROBLEM WITH DEADLINES IN WIRELESS SENSOR AND ACTOR NETWORKS	436
<i>W. Zhao, H. Chen</i>	
LOWER BOUNDS FOR THE MAKESPAN MINIMIZATION IN JOB SHOPS	442
<i>Y. Benziari, I. Kacem, P. Laroche, A. Nagih</i>	
DEGRADED LICENSE PLATE RECOGNITION SYSTEM FOR TOWN BUSES ON HIGHWAY	446
<i>B. Wu, H. Huang, Y. Chen, H. Lin, T. Lee, C. Chen</i>	
RECONFIGURABLE DISTRIBUTED CONTROL OF WATER DELIVERY CANALS	451
<i>J. Lemos, I. Sampaio</i>	
DYVEP: AN ACTIVE DATABASE SYSTEM WITH VERTICAL PARTITIONING FUNCTIONALITY	457
<i>L. Rodriguez, X. Li, A. Cuevas-Rasgado, F. Garcia-Lamont</i>	
REAL-TIME TELE-OPERATION AND TELE-WALKING OF HUMANOID ROBOT NAO USING KINECT DEPTH CAMERA	463
<i>I. Almetwally, M. Mallem</i>	
CONTROL OF WIND FARM CONNECTED DISTRIBUTION NETWORK	467
<i>M. Benchagra, M. Maaroufi</i>	
ROBUST H_{∞} CONTROL OF DISCRETE-TIME MARKOV JUMP UNCERTAIN SYSTEMS WITH BOUNDED TRANSITION PROBABILITIES	473
<i>C. Haddad, S. Djennoune, M. Bettayeb</i>	
MIMO SLIDING FUZZY TYPE-2 CONTROL WITH MANIPULATING APPROACHING PHASE	479
<i>M. Manceur, L. Menhour, N. Essounbouli, A. Hamzaoui</i>	

REAL-TIME DATA DRIVEN MONITORING AND OPTIMIZATION METHOD FOR IOT-BASED SENSIBLE PRODUCTION PROCESS	486
<i>Y. Zhang, S. Sun</i>	
FUZZY AND ADAPTIVE FUZZY PI CONTROLLER BASED VECTOR CONTROL FOR PERMANENT MAGNET SYNCHRONOUS MOTOR.....	491
<i>A. Seghir, T. Henni, M. Azira</i>	
THE EXPLOITATION AND DISCUSSION OF NEW MOBILE HEALTHCARE SYSTEM MODEL BASED ON SMART PHONE	497
<i>T. Zhu, L. Wang, J. Meng</i>	
RECENT ADVANCES IN PARTICLE SWARM OPTIMIZATION VIA POPULATION STRUCTURING AND INDIVIDUAL BEHAVIOR CONTROL	503
<i>X. Liang, W. Li, Y. Zhang, Y. Zhong, M. Zhou</i>	
A DYNAMIC BRANCH AND BOUND APPROACH FOR ROBOTIC RESCHEDULING WITH RANDOMLY ARRIVING JOBS.....	509
<i>P. Yan, X. Cai, Z. Zhou, X. Tang</i>	
COCASTING AND POWER CONTROL FOR ENERGY EFFICIENT INFORMATION DISSEMINATION IN WSNS.....	514
<i>J. Ilow, S. Rangappa, N. Aslam</i>	
TWO EXACT METHODS FOR MAPPING ON HETEROGENEOUS CPU/FPGA ARCHITECTURES	520
<i>O. Souissi, A. Abdelhakim</i>	
REAL-TIME CONTROL OF A SMALL URBAN STORMWATER NETWORK: MIXED LOCAL UPSTREAM/DISTANT DOWNSTREAM CONTROL STRUCTURE	526
<i>R. Degrave, J. Schoorens, X. Litrico</i>	
OPTIMAL TRAFFIC MANAGEMENT TO ENSURE EMERGENCY EVACUATION COMPLIANCE	532
<i>H. Fu, A. Pel, S. Hoogendoorn</i>	
PACKET LEVEL MODELING AND SIMULATION OF REAL-TIME ETHERNET PROTOCOLS FOR SMART GRIDS.....	538
<i>Z. Cai, M. Yu, L. Tung</i>	
TIME-DELAY EFFECT ON LOAD FREQUENCY CONTROL FOR MICROGRIDS.....	544
<i>C. Macana, E. Majica-Nava, N. Quijano</i>	
ADAPTIVE MODELING OF THE WELD POOL GEOMETRY IN GAS TUNGSTEN ARC WELDING	550
<i>Y. Liu, Y. Zhang</i>	
ANALYSIS ON SHANGHAI'S LOGISTICS DEMAND BASED ON BP NEURAL NETWORK.....	556
<i>J. Zhang, G. Yang</i>	
A MACHINE-TO-MACHINE BASED FRAMEWORK FOR DIABETES LIFESTYLE MANAGEMENT	562
<i>Z. Zhao, Q. Ma, C. Li, L. Liu, W. Li</i>	
AN ADAPTIVE PSM MECHANISM IN WLAN BASED ON TRAFFIC AWARENESS.....	568
<i>Y. Xie, X. Sun, X. Chen, Z. Jing</i>	
SINGLE MACHINE SCHEDULING WITH PAST-SEQUENCE-DEPENDENT DELIVERY TIMES AND LEARNING EFFECT	574
<i>Z. Zhu, Y. Fang, M. Liu, F. Chu</i>	
A GENERAL FRAMEWORK FOR MODELING INTERMODAL TRANSPORT NETWORKS	579
<i>L. Li, R. Negenborn, B. Schutter</i>	
A NOVEL RESOLVER CONVERTER BASED ON A MODIFIED TRACKING METHOD.....	586
<i>M. Benammar, A. Gonzales Jr.</i>	
MODEL PREDICTIVE CONTROL FOR A SUSTAINABLE TRANSPORT MODAL SPLIT AT INTERMODAL CONTAINER HUBS	591
<i>J. Nabais, R. Negenborn, M. Botto</i>	
MULTI-AGENT BASED ARCHITECTURE FOR VIRTUAL REALITY INTELLIGENT SIMULATION SYSTEM OF VEHICLES.....	597
<i>Y. Yu, A. Kamel, G. Gong</i>	
TOWARDS A DISTRIBUTED FRAMEWORK FOR TRANSPORTATION PLANNING: A FOOD SUPPLY CHAIN CASE STUDY	603
<i>M. Memon, B. Archimede</i>	
A SMART GRID SIMULATION FRAMEWORK FOR ELECTRICITY TRADING.....	609
<i>F. Angstmann, A. Bracher, S. Bhat, S. Ramaswamy</i>	

OUTPUT FEEDBACK MULTIPLE-PACKET TRANSMISSION NETWORKED CONTROL SYSTEMS	615
<i>S. Yang, T. Liang, J. Wu</i>	
THE EFFECT OF THE CHOICE OF THE CONTROL VARIABLES OF THE WATER LEVEL CONTROL OF OPEN CHANNELS: COMPARISON OF CONTROL SCHEMES USING THE ASCE TEST CANAL 2	621
<i>K. Horvath, M. Valentin, J. Rodellar</i>	
A SEAMLESS INTEGRATION, SEMANTIC MIDDLEWARE FOR CYBER-PHYSICAL SYSTEMS	627
<i>M. Franke, C. Seidl, T. Schlegel</i>	
ADAPTIVE DATA COMPRESSION FOR ENERGY HARVESTING WIRELESS SENSOR NODES	633
<i>M. Mohamed, W. Wu, M. Moniri</i>	
DAILY TRAFFIC VOLUME MODELING BASED ON TRAVEL BEHAVIORS	639
<i>Y. Hu, J. Hellendoorn</i>	
PREVENTING BLACK AND GRAY HOLE ATTACKS IN AODV USING OPTIMAL PATH ROUTING AND HASH	645
<i>H. Khattak, Nizamuddin, F. Khurshid, N. Amin</i>	
INCORPORATING TRANSPORT OVER WATER IN THE MULTI-OBJECTIVE WATER MANAGEMENT OF THE LAKE IJSSEL AREA IN THE NETHERLANDS	649
<i>X. Tian, P. Overloop, R. Negenborn, P. Torreblanca</i>	
PETRI NET BASED RESOURCE MODELING AND ANALYSIS OF WORKFLOWS WITH TASK FAILURES	655
<i>J. Wang</i>	
SURVEY ON BOTNET: ITS ARCHITECTURE, DETECTION, PREVENTION AND MITIGATION	660
<i>I. Ullah, N. Khan, H. Aboalsamh</i>	
NEURAL NETWORKS FOR WIND POWER GENERATION FORECASTING: A CASE STUDY	666
<i>R. Cancelliere, A. Gosso, A. Grosso</i>	
A FRAMEWORK FOR ENTERPRISE SOCIAL COMPUTING: TOWARDS THE REALIZATION OF ENTERPRISE 2.0	672
<i>Y. Baghdadi, Z. Maamar</i>	
HUMANOID ROBOT NAVIGATION: FROM A VISUAL SLAM TO A VISUAL COMPASS	678
<i>E. Wirbel, B. Steux, S. Bonnabel, A. Fortelle</i>	
A SYSTEM FOR LIVE LOCALIZATION IN SMART ENVIRONMENTS	684
<i>B. Wagner, B. Striebing, D. Timmermann</i>	
NON-UNIFORM HIERARCHICAL MODULATION FOR WIRELESS COMMUNICATION IN SMART GRID	690
<i>H. Bilil, S. Belmoubarik, G. Aniba, B. Elgraini, M. Maaroufi</i>	
IMPLEMENTATION AND COMPARISON OF DIFFERENT ALTERNATIVES TO REMOVE STEADY STATE ERRORS IN A TIME-DOMAIN L1 CONTROLLER	696
<i>P. Malaterre, D. Dorchies, J. Baume</i>	
MONITORING NUTRIENT CONCENTRATIONS IN TAMPA BAY WITH MODIS IMAGES AND MACHINE LEARNING MODELS	702
<i>N. Chang, Z. Xuan</i>	
A DISCRETE EVENT SIMULATION MODEL FOR HARVEST OPERATIONS UNDER STOCHASTIC CONDITIONS	708
<i>V. Borodin, F. Hnaien, N. Labadie, J. Bourtembourg</i>	
ADAPTIVE PROCUREMENT PLANNING IN GLOBAL SOURCING: A ROLLING HORIZON FORECASTING APPROACH	714
<i>Y. Cao, C. Chu, Y. Yu, L. Liang</i>	
TRADING TRANSPORT TIMELINESS AND RELIABILITY FOR EFFICIENCY IN WIRELESS SENSOR NETWORKS	720
<i>V. Sachidananda, A. Khelil, D. Umap, M. Majuntke, N. Suri</i>	
SENSOR FAULT DETECTION AND ISOLATION IN DIESEL AIR PATH USING FUZZY-ARTMAP NEURAL NETWORK	728
<i>M. Guermouche, M. Benkaci, G. Hoblos, N. Langlois</i>	
CONDITIONAL SERVO-COMPENSATOR OF AN AIRLAUNCH SYSTEM	734
<i>V. Nguyen, G. Damm</i>	
INTELLIGENT ROUTING STRATEGIES IN WIRELESS SENSOR NETWORKS FOR SMART CITIES APPLICATIONS	740
<i>A. Ortiz, F. Royo, T. Olivares, N. Timmons, J. Morrison, L. Orozco-Barbosa</i>	

HYBRID MODEL PREDICTIVE CONTROL FOR EQUIPMENT IN AN AUTOMATED CONTAINER TERMINAL	746
<i>J. Xin, R. Negenborn, G. Lodewijks</i>	
NICE-MRP: A NEAR-OPTIMAL RADIO-INTERFERENCE AWARE MULTI-PATH ROUTING PROTOCOL FOR MANETS	753
<i>W. Abdou, C. Bloch, D. Charlet, F. Spies</i>	
COALITIONAL CONTROL: AN IRRIGATION CANAL CASE STUDY.....	759
<i>F. Fele, J. Maestre, F. Muros, E. Camacho</i>	
NONLINEAR ADAPTIVE CONTROL OF NETWORKED POWER GENERATORS WITH REMOTE MEASUREMENT UNITS.....	765
<i>J. Lima, G. Damm</i>	
LEVEL FEATURE FUSION OF MULTISPECTRAL PALMPRINT RECOGNITION USING THE RIDGELET TRANSFORM AND OAO MULTI-CLASS CLASSIFIER	771
<i>A. Bouchemha, A. Nait-Ali, N. Doghmane</i>	
AN EFFICIENT VLSI ARCHITECTURE FOR 2-D DUAL-MODE SMDWT.....	775
<i>C. Hsia, J. Chiang, S. Chang</i>	
DYNAMIC MODEL OF STEER-BY-WIRE SYSTEM FOR DRIVER HANDWHEEL FEEDBACK	780
<i>N. Ait-Oufroukh, K. Messaoudene, S. Mammar</i>	
AN MPC SCHEME FOR ROUTING PROBLEM IN BAGGAGE HANDLING SYSTEMS: A LINEAR PROGRAMMING APPROACH	786
<i>Y. Zeinaly, B. Schutter, H. Hellendoorn</i>	
TOWARDS A SERVICE PROVIDING FRAMEWORK FOR FEDERATED SENSOR NETWORKS.....	792
<i>R. Xu, S. Yang, J. Chen</i>	
NMCA: NEIGHBOUR-AWARE MULTI-PATH CLUSTERING AGGREGATION IN WIRELESS SENSOR NETWORKS.....	798
<i>W. He, S. Yang, L. Yang</i>	
DETECTING USERS' BEHAVIORS BASED ON NONINTRUSIVE LOAD MONITORING TECHNOLOGIES.....	804
<i>Y. Chen, C. Chu, S. Tsao, T. Tsai</i>	
FAULT TOLERANT CONTROL WITH ADDITIVE COMPENSATION FOR FAULTS IN AN AUTOMOTIVE DAMPER.....	810
<i>J. Tudon-Martinez, S. Varrier, R. Morales-Menendez, R. Ramirez-Mendoza, D. Koenig, J. Martinez, O. Sename</i>	
FUZZY VECTOR CONTROL OF INDUCTION MOTOR.....	815
<i>S. Rafa, A. Larabi, L. Barazane, M. Manceur, N. Essounbouli, A. Hamzaoui</i>	
INFORMATION SYSTEM ARCHITECTURE FOR THE INTERACTION OF ELECTRIC VEHICLES WITH THE POWER GRID: BUSINESS-CASE INDIVIDUAL INSTANTIATION OF A GENERIC ARCHITECTURE ALLOWS FOR INTER-OPERABLE INFORMATION FLOWS	821
<i>G. Schuh, J. Fluhr, M. Birkmeier, M. Sund</i>	
ON THE DESIGN OF OPTIMAL ACTIVE/SLEEP SCHEME FOR AGGREGATOR NODE IN WIRELESS SENSOR NETWORKS	826
<i>X. Chen, C. Wang, W. Li</i>	
HAND GESTURE RECOGNITION USING CONTOUR BASED METHOD FOR TABLETOP SURFACES.....	832
<i>A. Bellarbi, H. Belghit, S. Benbelkacem, N. Zenati, M. Belhocine</i>	
A NEW APPROACH FOR TARGET COVERAGE IN WIRELESS SENSOR NETWORKS USING FUZZY LOGIC	837
<i>O. Banimelhem, E. Taqieddin, F. Al-Ma'Aqbeh</i>	
NEW NONLINEAR TAKAGI-SUGENO VEHICLE MODEL FOR STATE AND ROAD CURVATURE ESTIMATION VIA NONLINEAR PMI OBSERVER	843
<i>Z. Yacine, D. Ichalal, N. Oufroukh, S. Mammar, S. Djennoune</i>	
A PERIODIC EVENT SCHEDULING APPROACH FOR OFFLINE TIMETABLE OPTIMIZATION OF REGIONAL RAILWAYS.....	849
<i>M. Dotoli, F. Sciancalepore, N. Epicoco, M. Falagario, B. Turchiano, N. Costantino</i>	
A SUPPLY CHAIN DESIGN WITH PRODUCT LIFE CYCLE AND GREEN PROCUREMENT CONSIDERATIONS.....	855
<i>B. Khaoula, A. Hamid, G. Gilles, L. Taricir</i>	
FUZZY DNP BASED TAM3 FOR DERIVING THE FACTORS INFLUENCING THE ACCEPTANCE OF 3D HANDSETS BY LUM.....	861
<i>Y. Kao, C. Huang, Y. Leu</i>	
QUANTITATIVE ANALYSIS OF CARBON EMISSIONS OF CNC-BASED MACHINING SYSTEMS	869
<i>C. Li, Y. Tang, L. Cui, Q. Yi</i>	

“REUSABLE TRANSPORTATION ITEMS” MANAGEMENT: A CASE STUDY	875
<i>G. Guillaume, C. Chu, J. Zied</i>	
A HEURISTIC APPROACH TO SYNCHRONIZE PRODUCTION AND TRANSPORTATION PLANNING IN A MINERAL WATER INDUSTRY	881
<i>Y. Zhong, C. Chu, Z. Jemai</i>	
CONCEPTUAL MODEL OF A COLD STORAGE WAREHOUSE WITH PV GENERATION IN A SMART GRID SETTING	889
<i>R. Verzijlbergh, Z. Lukszo</i>	
RFID-ENABLED SMART ASSEMBLY WORKSHOP MANAGEMENT SYSTEM	895
<i>T. Qu, L. Zhang, Z. Huang, Q. Dai, X. Chen, G. Huang, H. Luo</i>	
THE POTENTIAL OF ELECTRIC VEHICLES TO FACILITATE A HIGH WIND POWER PENETRATION: INSPIRATION FOR THE CITY OF SHENZHEN, CHINA	901
<i>Y. Li, Z. Lukszo, M. Weijnen</i>	
PERFORMANCE EVALUATION OF THE NOVEL DSS BASED ON HUMANWARE SERVICE.....	907
<i>Y. Sheng, J. Yang, X. Zhou, X. Hang</i>	
PSO-BASED METHOD TO FIND ELECTRIC VEHICLE’S OPTIMAL CHARGING SCHEDULE UNDER DYNAMIC ELECTRICITY PRICE	913
<i>J. An, B. Huang, Q. Kang, M. Zhou</i>	
ESTIMATING STORAGE REQUIREMENTS FOR WIND POWER PLANTS	919
<i>M. Berecibar, M. Zhou</i>	
A VOLTAGE CONTROLLER FOR WIND TURBINE GENERATOR	925
<i>L. Hao, Z. Yang, A. Si, Y. Zhu</i>	
HOW TO MANAGE CONFLICT AND AMBIGUITIES IN LOCALIZATION AND MAP MATCHING?	931
<i>D. Gruyer, R. Belaroussi, A. Cord, V. Vigneron</i>	
Author Index	