

IISE Annual Conference and Expo 2019

Orlando, Florida, USA
18-21 May 2019

Volume 1 of 2

ISBN: 978-1-7138-1409-2

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2019) by Institute of Industrial & Systems Engineers (IISE)
All rights reserved.

Printed with permission by Curran Associates, Inc. (2020)

For permission requests, please contact Institute of Industrial & Systems Engineers (IISE)
at the address below.

Institute of Industrial & Systems Engineers (IISE)
3577 Parkway Lane, Suite 200
Norcross, GA 30092
USA

Phone: (770) 449-0460
Fax: (770) 441-3295

www.iise.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

VOLUME 1

549191 - FEASIBILITY ANALYSIS OF WIND-SOLAR ENERGY POWERED ELECTRIC VEHICLE CHARGING STATIONS.....	1
<i>H. Li, K. Labrador</i>	
549768 - AN INTEGRATED MULTI-SUPPLIER-RETAILER SUPPLY CHAIN WITH JIT DELIVERY	7
<i>P. Biswas, B. Sarker</i>	
555321 - A CASE FOR SUSTAINMENT MANAGEMENT OF GROUND WATER.....	13
<i>J. Munn, M. Beruvides</i>	
561650 - FUNDAMENTAL ELEMENTS OF REFLECTIVE PRACTICE IN ORGANIZATIONS	20
<i>G. Haghghat, N. Hosseinichimeh, B. Kleiner</i>	
565733 - PERFORMANCE MEASUREMENT SYSTEM FOR STRATEGIC AND OPERATIONS MANAGEMENT: ILLUSTRATIVE CASE	26
<i>L. Rocha, J. Cestari, E. Pinheiro de Lima, S. da Costa</i>	
571202 - MODELLING PROGRESS OF STUDENT PROBLEM SOLVING PROFICIENCY IN SENIOR DESIGN	32
<i>D. Pahwa, A. Vila-Parrish, D. Raubenheimer</i>	
573827 - OPTIMIZING RANDOMIZED SEARCH STRATEGIES IN SHORTEST PATH INTERDICTION PROBLEMS.....	38
<i>T. Holzmann, J. Smith</i>	
574009 - ENABLING THE SMART GRID RELIABILITY WITH POWER CLOUD.....	44
<i>L. Haghnegahdar, Z. Amjadi</i>	
574072 - KNOT OPTIMIZATION FOR MULTIVARIATE ADAPTIVE REGRESSION SPLINES	50
<i>X. Ju, V. Chen, J. Rosenberger, F. Liu</i>	
574249 - A PREDICTIVE ANALYTICS APPROACH FOR NURSING HOME HURRICANE EVACUATION.....	56
<i>N. Sakib, K. Hyer, D. Dobbs, L. Peterson, D. Jester, N. Kong, M. Li</i>	
574286 - INCORPORATING LEAN IN CLOSED LOOP SUPPLY CHAIN NETWORK DESIGN MODEL.....	62
<i>K. Das, B. McClung</i>	
576148 - APPLICATION OF BAYESIAN NETWORK TO TOTAL POINTS IN NBA GAMES.....	68
<i>E. Alameda-Basora, S. Ryan</i>	
576281 - MINIMIZING MAKESPAN OF BATCH PROCESSING MACHINE WITH UNEQUAL READY TIMES	74
<i>L. Ghrayeb, P. Damodaran</i>	
576909 - BATTERY ASSET MANAGEMENT WITH REMAINING CYCLE LIFE PROGNOSTICS.....	80
<i>X. Liu, P. Wang</i>	

577794 - DEFINING INTENSITY LEVELS AND POTENTIAL IMPACTS OF INCOMING HURRICANES	86
<i>V. Wendler-Bosco, C. Nicholson</i>	
578150 - USING PREDICTIVE ANALYTICS FOR CANCER IDENTIFICATION	91
<i>A. Choudhury, B. Eksloglu</i>	
578476 - ONLINE INDUSTRIAL TECHNOLOGY PROGRAM FOR ASSOCIATE IN APPLIED SCIENCE GRADUATES	97
<i>D. Batts, C. Dunn</i>	
578670 - EFFECT OF UNDERLYING FACTORS ON DISTRIBUTION FORECASTS USING VISUAL ANALYTICS.....	102
<i>K. Odubela, S. Jiang, R. Delpish, L. Davis</i>	
578673 - THE HYBRID CONVERGED CLASSROOM.....	108
<i>C. Scherrer, R. Keyser</i>	
578905 - ORDINAL-IMBALANCED DATA CLASSIFICATION BY SINGULAR VALUE DECOMPOSING TRUNCATION	114
<i>J. Lee, S. Kim</i>	
578936 - EARNED VALUE MANAGEMENT APPLICATIONS TO SOFTWARE DEVELOPMENT	135
<i>C. Kenney</i>	
578952 - CONCEPTUAL COST ESTIMATION DSS FOR UNIVERSITY CONSTRUCTION PROJECTS.....	141
<i>G. Moynihan, A. Chau</i>	
578966 - EMERGENCY RESPONSE UAS LOGISTICS MODELS FOR COASTAL AND OFFSHORE LOCATIONS	147
<i>J. Rau, R. Babiceanu, R. Seker</i>	
579281 - OPTIMAL MAINTENANCE POLICY FOR A PRODUCTION SYSTEM CONSIDERING DEMAND SATISFACTION	153
<i>N. Salari, V. Makis, A. Abbou</i>	
579348 - TECHNO-ECONOMIC OPTIMIZATION OF A PV + BATTERY SYSTEM: A CASE STUDY FOR A HOSPITAL IN ORLANDO, FL	159
<i>S. Tsianikas, J. Zhou, D. Birnie, D. Coit</i>	
579426 - SURROGATE-BASED OPTIMIZATION FOR MEGA-HUB LOCATION IN S. KOREA USING NEURAL-NETWORK.....	165
<i>J. Kim, K. Song, C. Chung, D. Mavris</i>	
579803 - MOLECULAR DYNAMICS STUDY OF QUENCHING EFFECT ON NANOIMPRINT OF GOLD.....	171
<i>A. Gaikwad, J. Clarke, S. Desai</i>	
579929 - ANALYSIS OF LAW ENFORCEMENT MOBILE COMPUTER TERMINAL INTERFACE	177
<i>M. Zahabi, T. Shupsky, A. Lyman</i>	
580142 - CORRELATION ANALYSIS BETWEEN WAVE POWER AND SEAWATER TEMPERATURE AND SALINITY	183
<i>H. Li, M. Cruz-Mendoza, A. Haces-Garcia, F. Haces-Fernandez</i>	

580450 - WATER-CONSTRAINED OPTIMAL OPERATIONS OF POWER GRID WITH RENEWABLE INTEGRATION	189
<i>J. Duarte, S. Hou, N. Fan</i>	
580547 - RELATIONSHIPS BETWEEN INDICATOR UTILITY AND USER ENVIRONMENT FOR SUSTAINABILITY INDICATORS	195
<i>G.-Y. Kim, K. Park, G. Kremer</i>	
580645 - EVALUATING THE DYNAMIC BEHAVIOR OF HEALTH IT USING MARKOV SIMULATION	201
<i>O. Omitaomu, M. Olama, O. Ozmen, L. Pullum, T. Kuruganti, H. Klasky</i>	
580659 - PREDICTING FOOD DONOR CONTRIBUTION BEHAVIOR USING SUPPORT VECTOR REGRESSION	207
<i>S. Paul, L. Davis</i>	
580807 - PREDICTING THE PERFORMANCE OF CRYOTHERAPY FOR WART TREATMENT	213
<i>M. Rahman, S. Wang, Y. Zhou, J. Rogers</i>	
580856 - SIMULATION-BASED DIGITAL TWIN FOR NEXT GENERATION PORTS	219
<i>C. Zhou, E. Chew, H. Li, Y. Peng, Q. Zhao</i>	
580970 - IMPROVED TECHNIQUES FOR OPTIMIZING HOSPITAL CRITICAL CARE OPERATION	225
<i>M. Yaqub</i>	
581149 - DETECTING PSYCHOLOGICAL SYMPTOMS USING COHORT INTELLIGENCE BASED REGULARIZED LOGISTIC REGRESSION	231
<i>S. Tutun, A. Ahmed, S. Irgil, I. Yesilkaya, M. Khasawneh</i>	
581150 - SIMULATION ANALYSIS OF A HIGHWAY DNN FOR AUTONOMOUS FORKLIFT DISPATCHING	237
<i>P. Sankaran, M. Li, M. Kuhl, R. Ptucha, A. Ganguly, A. Kwasinski</i>	
581277 - PREDICTION OF CERVICAL CANCER DIAGNOSIS USING MACHINE LEARNING TECHNIQUES	243
<i>R. Alkhaldeh, S. Mansi, S. Lu</i>	
581462 - COMPARISON OF ECONOMIC INFRASTRUCTURES BETWEEN INDIA AND U.S	249
<i>V. Suhagiya, B. Chang</i>	
581497 - IMPLEMENTING DESIGN PRINCIPLES FOR ERP PRODUCTION PLANNING MODULE FOR SMES	255
<i>O. Akande, E. Eneyo</i>	
581648 - MULTI-STAGE STOCHASTIC PROGRAMMING FOR PREPOSITIONING RELIEF SUPPLIES CONSIDERING EXPIRATION DATES	261
<i>O. Olanrewaju, S. Hu, Z. Dong</i>	
581658 - MODELING AND OPTIMIZATION IN RESOURCE SHARING SYSTEMS— APPLICATION TO BIKE SHARING	267
<i>X. Mo, W. Chan</i>	
581855 - RESILIENCY OPTIMIZATION FOR WESTERN U.S. TRANSMISSION GRID AGAINST CASCADING FAILURES	274
<i>J. Zhou, S. Tsianikas, D. Coit, F. Felder</i>	

581896 - CYBERSECURITY: BIG DATA ANALYTICS IN SPAM EMAILS AND NETWORK DATA.....	280
<i>L. Wang, R. Jones</i>	
581987 - THE EFFECT OF ADDING STOPS TO A DELIVERY ROUTE.....	286
<i>B. Bassett, N. Gautam</i>	
582184 - A HEURISTIC FOR MINIMIZING TOTAL WEIGHTED TARDINESS OF PARALLEL BPM	292
<i>M. Hulett, P. Damodaran</i>	
582293 - RADIATION EXPOSURE/COST REDUCTION IN DIAGNOSIS OF PEDIATRICS APPENDICITIS: ULTRASOUND/COMPUTERIZED TOMOGRAPHY	298
<i>F. Rayne, W. Cao, K. Layton</i>	
582337 - ASSESSING THE EFFECTIVENESS OF PERFORMANCE MEASUREMENT FRAMEWORK FOR NON-PROFIT ORGANIZATIONS	304
<i>K. Ahmed, C. Leon</i>	
582450 - MULTIMODAL LONG-HAUL SHIPMENT USING ANTICIPATORY FREIGHT SELECTION AND ENSEMBLE CLUSTERING	310
<i>A. Assemi, S. Yoon, H. Wang</i>	
582514 - A MILP MODEL FOR PERSONALIZED MEAL RECOMMENDATIONS TO HBCU STUDENTS.....	316
<i>B. Cottrell, X. Qu, M. Anwar, P. Hines</i>	
582538 - MODELING OF LASER LITHOTRIPSY: AN OPTIMIZATION STUDY	322
<i>M. Mahyoub, M. Khasawneh</i>	
582630 - CLASSIFICATION OF PROJECTS INVOLVING DIGITAL TRANSFORMATION IN AN AUTOMOTIVE INDUSTRY.....	328
<i>C. Rodrigues, I. de Freitas, J. Cestari, F. Deschamps, E. Loures</i>	
582642 - IMPROVING EFFICIENCY AND AGILITY IN BUSINESS CONTINUITY PLANS.....	334
<i>M. Beneke, R. Mcneill, K. Lawrence, M. Brown</i>	
582697 - CHALLENGES IN A LEAN PROJECT IN HEALTH CARE.....	341
<i>I. Lellis, G. Triminio, K. Schmahl</i>	
582712 - DESIGNING A RELIABLE, ROBUST INLAND WATERWAY TRANSPORTATION NETWORK UNDER UNCERTAINTY	347
<i>A. Aghalari, F. Nur, M. Marufuzzaman, S. Puryear</i>	
582745 - IMPROVING SCHOOL LUNCHROOM FLOW WITH LEAN SIX SIGMA AND SIMULATION	353
<i>S. Furterer, E. Trappe, S. Alshaikh</i>	
582825 - AN APPROACH TO OPTIMIZE A REGIONAL TRAUMA NETWORK.....	359
<i>M. Vaishnav, P. Parikh, P. Parikh, N. Kong</i>	
582852 - INTERACTIVE OPTIMIZATION TOOL FOR MEDICAL SUPPLY DISTRIBUTION	365
<i>T. Painruttanasukho, Z. Zabinsky, L. Petroianu</i>	
582925 - LEAN SIX SIGMA TOOLBOX: INSIGHTS ON USAGE TRENDS IN HOSPITALS.....	371
<i>N. Erdil</i>	

582986 - QUEUEING BASED ANALYSIS INFRASTRUCTURE FOR HOSPITAL MANAGEMENT	377
<i>G. Curry, M. Erraguntla, M. Lawley</i>	
582995 - MULTI-APPOINTMENT OUTPATIENT SCHEDULING IN CARDIOLOGY	383
<i>L. Apergi, J. Baras, B. Golden, K. Wood</i>	
583004 - AGENT-BASED SIMULATION OF AI-ASSISTED, TRANSFER OF CARE	390
<i>P. Stone, U. Karki, S. Ganapathy</i>	
583014 - A NOVEL DESIGN OF AN ERGONOMIC SURGICAL SUPPORT SYSTEM	396
<i>S. Al-Qudah, A. Froning, K. Sumpster, E. Martinez, A. Al-Qudah</i>	
583017 - DISRUPTIVE POTENTIAL OF ILLICIT SUPPLY CHAIN MEMBERS	402
<i>S. Dubey, H. Marini</i>	
583025 - CYBER-PHYSICAL CONTROL AND OPTIMIZATION FOR BIOFUEL 4.0	408
<i>S. Hansen, A. Mirkouei, M. Xian</i>	
583060 - STUDYING OBJECTIVE MEASURES OF PRESSURE REDISTRIBUTION DURING PROLONGED TASK SEATING	414
<i>M. Hammond, J. Martinez, S. Butt, T. Fredericks, T. Bellingar</i>	
583079 - PRODUCT OPERATING DATA-DRIVEN INVERSE DESIGN WITH ENSEMBLE LEARNING.....	420
<i>L. Hou, R. Jiao</i>	
583113 - ANALYSIS OF AIRLINE AND PASSENGER DELAY COSTS USING FAA DATA.....	426
<i>A. Dand, B. Yildirim, K. Saeed</i>	
583132 - MONITORING UTILITY POLE HEALTH CONDITIONS USING UAV AND DEEP LEARNING.....	433
<i>Z. Zhu, J. Zhang, M. Alam, B. Tokgoz</i>	
583183 - BODY MOTION MEASURES AND CENTER OF PRESSURE RELATIONSHIP WHILE SITTING.....	439
<i>J. Martinez, M. Hammond, T. Fredericks, S. Butt</i>	
583185 - SIMULATION OPTIMIZATION OF INTEGRATED INVENTORY AND MATERIAL HANDLING SYSTEM	446
<i>A. Bhosekar, S. Eksioglu, T. Isik, R. Allen</i>	
583193 - MEASURING THE IMPACT OF COORDINATION IN DISRUPTING ILLICIT TRAFFICKING NETWORKS.....	452
<i>J. Wilt, T. Sharkey</i>	
583222 - A HYBRID METAHEURISTIC FOR MINIMIZING TOTAL TARDINESS AND ELECTRICITY COSTS.....	458
<i>A. Ebrahimi, H. Jeon</i>	
583275 - INVENTORY ANALYSIS FOR PLANT LAYOUT, PROCESS IMPROVEMENT AND LEAN OPERATIONS.....	464
<i>Q. Lee</i>	
583276 - FEASIBILITY OF BIOFILTERS TO REDUCE POLLUTANT EMISSIONS IN DIESEL ENGINES.....	470
<i>J. Garcia, H. Moya, K. Lee, N. Vargas</i>	

583277 - A MULTI-OBJECTIVE OPTIMIZATION MODEL FOR VEHICLE-TO-GRID SYSTEMS.....	477
<i>O. Egbue, C. Uko</i>	
583300 - USING A LEADING INDICATOR MATRIX (LIM) IN CONSTRUCTION MEGAPROJECTS	483
<i>B. Robertson, M. Beruvides</i>	
583312 - REGRESSION MODELING OF APPLIANCES ENERGY USE IN A LOW-ENERGY HOUSE.....	489
<i>Y. Al-Wesabi, K. Somarathna, Y. Wang, S. Kwon</i>	
583321 - SAFETY SYSTEMS ARCHETYPE FOR HIGH RELIABILITY ORGANIZATIONS (HROS).....	495
<i>R. McClary, M. Beruvides, J. Cantu</i>	
583322 - AN IDENTIFIED NEED TO QUANTIFY AN ECONOMY'S EFFICIENCY EFFORT	501
<i>A. Elizondo-Noriega, N. Tiruvengadam, G. Guemes-Castorena, V. Tercero-Gomez, M. Beruvides</i>	
583346 - STREAMLINE PATIENTS FLOW THROUGH LEAN MOBILE APPLICATION IN EMERGENCY DEPARTMENT	507
<i>A. Muflih, A. Elshennawy</i>	
583360 - DRUG CONSUMPTION DATA: A COMPREHENSIVE ANALYSIS AND A PREDICTIVE MODEL.....	513
<i>M. Mahyoub, L. Lekham, E. Alenany, L. Tarawneh, D. Won</i>	
583406 - RULE-BASED SMART CONTRACTS DESIGN IN SUPPLY CHAIN.....	519
<i>H. Alshayji, H. Liu</i>	
583409 - INFLUENTIAL FACTORS FOR FAILURE TO SHOW-UP FOR A POSTPARTUM VISIT.....	525
<i>A. Kasasbeh, M. Yildirim, A. Booth, M. Khasawneh</i>	
583411 - PREDICTING DISEASE INCIDENCE USING PREDICTIVE MODELS AND SOCIO-ECONOMIC DATA.....	532
<i>M. Urzillo, L. Luangkesorn, D. Devers, C. Ren</i>	
583414 - K-MEANS CLUSTERING FOR PRODUCT PICK SLOTTING IN A DISTRIBUTION CENTER	540
<i>C. Nguyen, N. LaVarra</i>	
583435 - COMPARATIVE STUDY OF TRADITIONAL FORECASTING METHODOLOGIES VS MACHINE LEARNING ALGORITHMS	547
<i>A. Aluko, H. Liu</i>	
583440 - THRESHOLD CONTROL POLICY FOR BATTERY ENERGY STORAGE OPERATIONS	552
<i>A. Walker, S. Kwon</i>	
583443 - RENEWABLE ELECTRICITY GENERATION IMPACT ON PEAK DEMAND AND RESPONSE STRATEGIES	558
<i>O. Aponte, K. McConky</i>	

583453 - K-PROTOTYPE CLUSTERING ALGORITHM FOR SEGMENTATION OF PRIMARY CARE PATIENTS	564
<i>M. Yildirim, M. Aladeemy, M. Khasawneh, A. Booth, S. Madathil</i>	
583461 - USING ROBOTICS TO DEVELOP PEDAGOGICAL EXPERIENCES IN INDUSTRIAL ENGINEERING EDUCATION	570
<i>R. Villalobos, E. Fernandez, J. Colochio</i>	
583466 - LEAN DISTRIBUTION AND ROUTE OPTIMIZATION IN MEXICO'S LARGEST DISTRIBUTOR.....	574
<i>S. Benitez, M. Miller, L. Zavala, P. Santos, S. Loreda, A. Sarmiento, H. Garcia-Reyes, I. Ruiz</i>	
583470 - SIMULATION-BASED MACHINE LEARNING SURROGATE MODEL FOR POST- DISASTER ROAD-BRIDGE TRANSPORTATION NETWORK	580
<i>Y. Wen, C. Nicholson</i>	
583502 - RENEWABLE ENERGIES: REDUCING COST-BY-EXPANSION OF RGV ELECTRICAL UTILITY COMPANIES.....	586
<i>H. Moya, D. Quintero, A. Srivastava</i>	
583518 - FACILITY LOCATION SELECTION FOR THE HUMANITARIAN NEEDS OF REFUGEES.....	593
<i>E. Gunay, K. Park, S. Kandukuri, G. Kremer</i>	
583533 - VACCINE DISTRIBUTION STRATEGIES AGAINST POLIO: AN ANALYSIS OF TURKEY SCENARIO.....	599
<i>E. Gunay, K. Park, S. Aydogan, G. Kremer</i>	
583547 - EXPLOITING LOGISTICS ANOMALY DETECTION USING MARITIME BIGDATA	605
<i>Y. Oh, S. Kim</i>	
583550 - ADAPTIVE ARTIFICIAL AGENT RESPONSE TIME IMPACT ON HUMAN-AGENT TEAM PERFORMANCE	611
<i>D. Canzonetta, M. Miller</i>	
583559 - METAHEURISTIC FOR SOLVING A TWO-STAGE STOCHASTIC BIOFUEL HUB- AND-SPOKE NETWORK PROBLEM.....	617
<i>M. Aboytes-Ojeda, K. Castillo-Villar</i>	
583570 - A HYBRID PEDESTRIAN EVACUATION MODEL FOR TSUNAMIS	623
<i>J.-E. Faucher, S. Vavila, X. Hernandez-Cruz</i>	
583574 - ESTABLISHING A LINK BETWEEN ELECTRODERMAL ACTIVITY AND CLASSROOM ENGAGEMENT	629
<i>Leslie Potter</i>	
583579 - A METHOD TO INTEGRATE UCD PROCESS INTO AGILE DEVELOPMENT APPROACH.....	635
<i>S. Prabhala, T. Chouinard</i>	
583608 - LEAN SIX SIGMA IMPROVEMENT OF HIGHER EDUCATION STUDENT HIRING PROCESSES	641
<i>S. Furterer</i>	
583617 - STAKEHOLDER ENGAGEMENT IN THE PARTICIPATIVE RE-DESIGN OF THE CURRICULUM REFORM	647
<i>P. Barco-Alzate, D. Moreno-Luna, C. Ramirez, A. Bernal, S. Cabrales</i>	

583675 - THERMAL HISTORY PREDICTION OF ADDITIVE MANUFACTURING PROCESSES USING THERMAL IMAGES	653
<i>M. Khanzadeh, W. Tian, L. Bian</i>	
583684 - INTERDEPENDENT INFRASTRUCTURE SYSTEM RISK AND RESILIENCE TO NATURAL HAZARDS	659
<i>B. Rachunok, R. Nateghi</i>	
583685 - MAINTAINING VISUAL WORKPLACE IN OUTPATIENT CLINICS USING KANBAN AND 5S	665
<i>M. El-Sharo, S. Al-Qudah, J. Panco</i>	
583717 - DEVELOPMENT OF A PROJECT TRACKING INFORMATION SYSTEM USING AGILE METHODOLOGY	671
<i>P. Biswas, S. Schultz</i>	
583731 - A MODEL TO ASSESS DRIVERS' PERFORMANCE BASED ON FUEL ECONOMY	677
<i>J. Diaz-Ramirez, J. Huertas</i>	
583749 - OPTIMIZATION ON INITIAL INVENTORY OF BIKE SHARING SYSTEM	683
<i>C. Lim, D. Banga</i>	
583796 - A LOW-COST ONBOARD SENSING DEVICE FOR ROAD SURFACE CONDITION ASSESSMENT	689
<i>Y. Cai, J. Derouin</i>	
583825 - DELAYED TRANSFER OF CARE IN NHS ORGANIZATIONS:IT IS FUTURE FORECASTING	695
<i>T. Alibrahim, A. Shamsan, H. Lewis, B. Aldeek</i>	
583828 - CURB SPACE PLANNING IN URBAN TRANSPORTATION SYSTEM	701
<i>M. Yu, A. Bayram</i>	
583831 - CAPACITY PLANNING FOR VIRTUAL AND OFFICE APPOINTMENT IN CHRONIC CARE	708
<i>X. Yu, A. Bayram</i>	
583833 - OPTIMIZE TRACEABILITY AND TRANSPARENCY USING BATCH DISPERSION AND BLOCKCHAIN TECHNOLOGY	715
<i>M. Maity, A. Sinha</i>	
583859 - STRATEGIC MARKET DEPLOYMENT PLANNING: FARM TO TABLE LOGISTICS PLATFORMS	721
<i>I. Sanders, J. Zhao, B. Montreull</i>	
583877 - AN ARCHITECTURE-ORIENTED AGILE APPROACH FOR DRIVING ORGANIZATIONAL CHANGE.....	727
<i>P. Carvalho, F. Deschamps, E. Loures, F. Gonzalez</i>	
583912 - DECISION-MAKING USING Z-AXIOMATIC DESIGN	733
<i>S. Aydogan, D. Akay, G. Kremer, E. Gunay, K. Park, F. Boran</i>	
583939 - RE-DESIGNING SURGICAL SCHEDULING USING LEAN TOOLS	739
<i>M. Lotfizadeh, S. Wang</i>	
583940 - KITTING PROJECT- PROCESS LAYOUTS & IMPLEMENTATION	744
<i>Y. Kothari, H. Zenth</i>	

583969 - IMPROVING COMMAND AND CONTROL COGNITION THROUGH COMPLEX DATA SONIFICATION	750
<i>J. Viraldo, L. Guo</i>	
583976 - ASSESSING OIL AND GAS SUPPLY CHAIN RESILIENCE: BAYESIAN NETWORK APPROACH.....	756
<i>N. Hossain, R. Jaradat, M. Marufuzzaman, R. Buchanan, C. Rinaudo</i>	
584002 - HEALTHCARE ROBOTICS: KEY FACTORS THAT IMPACT ROBOT ADOPTION IN HEALTHCARE	762
<i>S. Alla, P. Pazos</i>	
584016 - SUSTAINABLE UTILIZATION OF POST DISASTER WASTE:CASE STUDY OF NEPAL EARTHQUAKE.....	768
<i>P. Pradhananga, M. El Zomor</i>	
584020 - EFFECT OF STRATEGIES ON THE EFFCICENCY OF AIPIORT EMERGENT EVACUATION.....	774
<i>S. Guo, D. Liu, J. Chen, J. Thropp, V. Vaikathusseril, S. Namilae, Y. Seong</i>	
584041 - TECHNOLOGY ABANDONMENT AND THE TIME VALUE OF DIFFUSION	781
<i>A. Parvin, M. Beruvides</i>	
584049 - KNOWLEDGE EXCHANGE MECHANISMS IN AGILE ENVIRONMENTS FOR GLOBALLY OUTSOURCED TEAMS	787
<i>K. Castelle, E. Dario</i>	
584066 - DEVELOPING A TRIZ-BASED DESIGN FOR FLEXIBILITY TOOL FOR MANUFACTURING FACILITIES.....	793
<i>L. Potter, S. Raje, J. Oftedal, G. Kremer, A. Bastias, K. Molenaar, K. Madson, B. Franz</i>	
584072 - MIFT - MOVE IT FORWARD THEORY; OPERATIONS MANAGEMENT DOWNTIME MANAGEMENT	800
<i>W. Edwards, S. Sengupt, M. Latcha, F. Washko</i>	
584085 - A SYSTEMS ENGINEERING APPROACH TO DESIGNING AN AT ASSESSMENT CLINIC.....	806
<i>M. Varghese, E. Perez, A. Schwarz</i>	
584088 - MEDICAL IMAGING SERVICES COST ANALYSIS	812
<i>I. Padilla-Martinez, M. Mendez-Pinero, V. Rodriguez-Brun, K. Rodriguez-Echevarria, R. Seijo-Vidal, P. Calentin-Castillo</i>	
584094 - ECONOMIC ANALYSIS OF USING UAV FOR MAIL DELIVERY	818
<i>P. Parsa, B. Wooten, E. Alvarez</i>	
584104 - SEQUENTIAL DESIGN FOR IDENTIFICATION OF STABILITY REGION FOR DYNAMIC SYSTEMS.....	824
<i>C. Cheng, Y. Che</i>	
584130 - ANALYSIS OF LEAN SCHEDULING PRACTICES IN A REMANUFACTURING ENVIRONMENT.....	830
<i>J. Heyward, P. Stanfield</i>	

VOLUME 2

584140 - IMPLEMENTING KAIZEN THROUGH A LEAN RACE MODEL: A CASE STUDY	836
<i>R. Janahi, A. Zarreh, H.-D. Wan, Y. Lee</i>	
584162 - SMART AND ACTIVE LEARNING MODEL TO DEVELOP STUDENT'S COMPETENCES	842
<i>M. Ruiz-Cantisani, E. Arrambide-Leal, L. Cardenas-Barron</i>	
584165 - APPLICATION OF ACQUISITION THEORY	848
<i>E. Payne, E. Corum, P. Collopy</i>	
584174 - SYSTEMS ENGINEERING DESIGN OF INTERACTIVE RUNWAY TAXIING APPLICATION	854
<i>Y. Cheng, D. Liu, D. Metscher, D. Vincenzi</i>	
584178 - PROCESS IMPROVEMENT FOR TURNOVER TIME IN OPERATING ROOMS.....	861
<i>S. Bergmann, S.-J. Chen</i>	
584180 - THE EFFECT OF TIES IN NONPARAMETRIC STATISTICAL PROCESS MONITORING	867
<i>L. Benavides, V. Tercero-Gomez, A. Cordero, L. Meza, G. Hernandez, J. Conover</i>	
584195 - NURSING HOURS EFFECT ON ED THROUGHPUT AND QUALITY METRICS.....	873
<i>R. Alkhalwaldeh, S. Lam, M. Khasawneh, K. Jarrold, V. Alders</i>	
584199 - COMPARING PREDICTIVE MODELS USING K-FOLD CROSS-VALIDATION FOR AUTO AUCTION PREDICTION	879
<i>A. Alfuhaid, S. Wang</i>	
584230 - IMPROVEMENT OF THE WASTE MANAGEMENT SYSTEM IN BOTTLING PLANT	885
<i>R. Quintero-Sanchez, J. Montoya-Campana, R. Solis-Corral, C. Herrera-Arreola, G. Lazo- Quintanilla, L. Cardenas-Barron</i>	
584236 - INTELLIGENT FRAMEWORK TO RENOVATE CURRICULUM IN ACCORDANCE WITH TECHNOLOGY TRENDS.....	890
<i>J. Yoo, P. Balachandranath</i>	
584260 - A NOVEL OPTIMIZATION PLANNING MODEL IN GREEN SUPPLY CHAIN NETWORKS.....	896
<i>B. Elahi, W. Wooten</i>	
584295 - FEATURE BASED HONEYCOMB INFILL FOR 3D PRINTING.....	902
<i>A. Ahsan, T. Ihrke, B. Khoda</i>	
584296 - SKU-BASED FORECASTING NATIONAL SALES FOR AN AGRICULTURAL MANUFACTURING COMPANY	909
<i>J. Gonzalez-Espinosa, L. Villarreal-Armendaiz, M. Ortega-Saldana, G. Reyes-Schudels</i>	
584309 - SIX SIGMA PROJECT RECOGNITION AND PRIORITIZATION	915
<i>D. Martinez, I. Loera-Hernandez, V. Tercero-Gomez</i>	
584312 - ISOMORPHIC ANALYSIS WITHIN COMMONS INFRASTRUCTURE SYSTEMS FOR COMMONALITY AND OPTIMIZATION.....	921
<i>K. Horbatuck, M. Beruvides</i>	

584318 - BIOFUEL SUPPLY CHAIN NETWORK DESIGN WITH BIOMASS QUALITY CONSIDERATIONS	927
<i>F. Nur, M. Aboytes, K. Castillo-Villar, M. Marufuzzaman</i>	
584319 - GAME THEORY MODELING OF COLLABORATIVE SUPPLY CHAINS.....	933
<i>A. Altherwi, N. Nezamodini</i>	
584334 - UNCONVENTIONAL LOGISTICS SYSTEMS	939
<i>A. Marathe, M. Awwad</i>	
584343 - BARRIERS TO SUSTAINABLE CONSTRUCTION	945
<i>K. Desai, B. Chang</i>	
584395 - COOPERATIVE GAME-THEORETIC MODELING OF RESIDENTIAL ENERGY MANAGEMENT IN SMART GRID.....	951
<i>F. He, N. Shah, X. Fu</i>	
584399 - TACTICAL DESIGN OF A RESILIENT HUMANITARIAN TRANSPORTATION NETWORK.....	957
<i>Y. Secerdin, M. Erkoc</i>	
584401 - DEVELOPING STUDENT COMPETENCES THROUGH AN ALUMNI-PROFESSOR LEARNING COLLABORATION MODEL.....	963
<i>G. Caffarel-Rodriguez</i>	
584405 - COMPARATIVE STUDY ON LONG AND SHORT CELLULOSE FIBER FILLED BIO-INK.....	969
<i>A. Habib, R. Kalidhindi, V. Sathish, B. Khoda</i>	
584423 - ENHANCED JOINT PRICING AND LOT-SIZING DECISIONS IN A SERIAL SUPPLY-CHAIN	975
<i>L. Duan, B. Venegas, J. Ventura, S. Kweon, S. Hwang</i>	
584436 - UNDERSTANDING THE IMPACT OF SUPPLY CHAIN RESILIENCE ANTECEDENTS THROUGH FCM.....	982
<i>S. Sabahi, P. Stanfield</i>	
584457 - A LIFE-CYCLE MODEL FOR GAMIFIED ACTIVITIES IN UNDERGRADUATE COURSES.....	988
<i>H. Garcia-Reyes</i>	
584464 - ASSESSING THE INFLUENCE OF MANUFACTURING FLEXIBILITY ON FACILITY CONSTRUCTION COSTS.....	994
<i>S. Gregory, A. bastias, K. Molenaar, K. Madson, B. Franz, L. Potter, G. Kremer</i>	
584469 - FACTOR SELECTION FOR INFLUENZA EPIDEMIC MITIGATION USING BI-OBJECTIVE OPTIMIZATION	1001
<i>A. Bogyrbayeva, H. Tatapudi, H. Charkhgard, W. Silva-Sotillo</i>	
584472 - TEXT MINING TO ANALYZE EMPLOYEE FEEDBACK ON WORK ENVIRONMENT.....	1007
<i>R. Shabbar, S. Madathil, S. Poranki, M. Khasawneh</i>	
584490 - SUSTAINABLE ENERGY MIX FOR OIL REFINERY	1013
<i>R. Khedr, N. Galal, K. El-Kilany</i>	

584496 - OPTIMAL FLEET OPERATION PLANNING BY SMART SENSING AND MAINTENANCE.....	1019
<i>X. Gong, S. Wang, W. Zhang, Y. Fei, D. Mitchell, R. Jiao, N. Gebraeel</i>	
584499 - A STATISTICAL ANALYSIS OF SURGEONS' PREFERENCE ON ROBOT-ASSISTED SURGERIES.....	1025
<i>S. Alla</i>	
584503 - MULTI-DIMENSIONAL FRAMEWORK TO ASSESS RESILIENCY OF POWER INFRASTRUCTURE.....	1031
<i>B. Kar, S. Mohebbi, O. Omitaomu</i>	
584513 - INDUSTRY 4.0: SENSORS IMPLEMENTATION FOR DEVELOPING A SMART CITY.....	1036
<i>B. Trevino-Elizondo, M. Garza-Farias, M. Ruiz-Cantisani, E. Arrambide-Leal, L. Cardenas-Barron</i>	
584533 - SIMULATION BASED SCHEDULING FOR HIGH MIX AND LOW VOLUME ENVIRONMENT.....	1042
<i>A. Aljubiri, S. Wang</i>	
584543 - AN LEAN IMPLEMENTATION STRATEGY IN HIGH MIX LOW VOLUME ENVIRONMENT.....	1048
<i>A. Aljubiri, S. Wang</i>	
584550 - IMPROVEMENT OF PRODUCTIVITY TO DECONTAMINATE MERCURY AND CADMIUM IN WATER.....	1054
<i>I. Loera-Hernandez, G. Espinosa-Garza, J. Aguilera, G. Trevino</i>	
584553 - OPPORTUNISTIC MAINTENANCE OPTIMIZATION BASED ON STOCHASTIC DEPENDENCE FOR MULTI-COMPONENT SYSTEM.....	1059
<i>S. Alghanmi, S. Wang</i>	
584557 - AN OPTIMIZATION MODEL FOR MICROGRID PORTFOLIO CONSIDERING DEMAND-SIDE MANAGEMENT.....	1075
<i>S. Nazemi, K. Mahani, A. Ghofrani, B. Kose, M. Jafari</i>	
584576 - A HEURISTICS BASED PARTITION METHODOLOGY FOR ADDITIVE SUBTRACTIVE MANUFACTURING PROCESSES.....	1081
<i>Y. Li, A. Chen</i>	
584582 - INSULIN-GLUCOSE MODEL FOR A MODEL-BASED INSULIN PUMP CONTROLLER.....	1087
<i>N. Bell, J. Lee</i>	
584591 - DIAGNOSIS OF INFORMATION SYSTEMS FOR THE HOTEL SECTOR AT PUERTO-MORELOS.....	1093
<i>D. Lopez-Ruiz, E. Gaeza-Gazca, K. Cantu-Flores, P. Webber-Garza, E. Arrambide-Leal, M. Ruiz-Cantisani, L. Cardenas-Barron</i>	
584593 - COLLABORATIVE-CROWDSOURCING PRODUCT FULFILLMENT: OPEN BUSINESS MODEL FOR DESIGN AND MANUFACTURING.....	1099
<i>X. Gong, S. Wang, W. Zhang, M. Song, R. Jiao, N. Gebraeel</i>	
584596 - THE IMPORTANCE OF SUCCESS IN GENERAL CHEMISTRY FOR STEM MAJORS.....	1105
<i>M. Alam, B. Tokgoz, O. Gunaydin, M. Singh</i>	

584604 - THE USE OF LEMON HUSK TO DECONTAMINATE METALS IN WATER.....	1111
<i>I. Loera-Hernandez</i>	
584612 - MULTIDIMENSIONAL PERFORMANCE EVALUATION OF COMPANY'S COMPETITIVENESS BY DEVELOPING SMART CONNECTED PRODUCTS.....	1116
<i>W. Zhang, L. Hou, R. Jiao</i>	
584616 - SMART ELEVATOR DISPATCHING AND OPTIMIZATION BY HUMAN USAGE PATTERNS.....	1122
<i>S. Wang, X. Gong, W. Zhang, J. Chen, R. Jiao</i>	
584626 - DEATH RISK CLASSIFICATION FOR CONGESTIVE HEART FAILURE PATIENTS.....	1128
<i>B. Malaei, S. Karimi</i>	
584629 - SMART SENSING SYSTEM FOR WEIGHT TRACKING AND FLEET OPERATION PLANNING.....	1134
<i>S. Wang, X. Gong, W. Zhang, M. Song, L. Hou, R. Jiao</i>	
584650 - OPTIMAL LAND USE ALLOCATION FOR BIOFUEL FEEDSTOCK PRODUCTION.....	1140
<i>A. Cram, J. Espiritu, H. Taboada</i>	
584677 - SIMULATION MODELING OF THE CLOSED-LOOP VESSEL SCHEDULING FOR PETROCHEMICAL PRODUCTS.....	1146
<i>S. Al-Mutawa, M. Sumaidaa, H. An</i>	
584699 - SELECTION OF POST-DISRUPTION RECOVERY STRATEGY FOR RESILIENCE.....	1152
<i>J. Wu, P. Wang</i>	
584708 - A COMPARISON STUDY OF LITHIUM-ION BATTERY POWER MANAGEMENT TECHNIQUES.....	1158
<i>B. Chen, P. Wang</i>	
584723 - HOSPITAL TRANSPORT DEPARTMENT WORKFLOW AND MANPOWER PLANNING IMPROVEMENT.....	1164
<i>M. Mikaeili, S. Lam, J. Yao, J. Bosire</i>	
584727 - IMPROVING HEALTHCARE QUALITY OF SERVICE THROUGH A TEXT MINING FRAMEWORK.....	1170
<i>M. Mikaeili, S. Lam, J. Yao, J. Bosire</i>	
584896 - STOCHASTIC MODEL FOR INTEGRATED STORAGE-ORDER PICKING SYSTEM WITH MULTI-LINE ORDERS.....	1176
<i>V. Bansal, D. Roy</i>	
585042 - DYNAMIC COBOT ORDER PICKING STRATEGIES FOR A PICK-SUPPORT AGV SYSTEM.....	1183
<i>K. Azadeh, D. Roy</i>	
585503 - SOURCES OF RISK IN ELECTIONS SECURITY.....	1190
<i>H. Locraft, P. Gajendiran, M. Price, N. Scala, P. Goethals</i>	
585959 - INSIDER ATTACK METRICS FOR CYBERSECURITY: INVESTIGATING VARIOUS RESEARCH OPTIONS.....	1196
<i>P. Goethals, N. Yodo</i>	

586778 - CYBERSECURITY MANAGEMENT VIA CONTROL STRATEGIES FOR RESILIENT CYBER-PHYSICAL SYSTEMS.....	1202
<i>N. Yodo, P. Goethals</i>	
588063 - ISOLATION AND QUARANTINE POLICY FOR CONNECTED VEHICLES ROUTING.....	1208
<i>M. Mook, Em Kloth, J. Lee</i>	
592531 - ELECTRICITY INFRASTRUCTURE PLANNING OPTIMIZATION FOR SUB-SAHARAN AFRICAN COUNTRIES.....	1214
<i>Y. Chen, V. Thomas</i>	
608212 - DYNAMIC SHELF-LIFE PREDICTION SYSTEM TO IMPROVE SUSTAINABILITY IN FOOD BANKS.....	1220
<i>A. Gharehyakheh, C. Krejci, J. Cantu, J. Rogers</i>	
609134 - A SYSTEMS ENGINEERING APPROACH TO CREATING A MANUFACTURING INNOVATION INSTITUTE.....	1226
<i>G. Harris, L. Caudle</i>	
609844 - APPOINTMENT SCHEDULING IN PRIMARY CARE WITH RECURRING VISITS.....	1232
<i>P. Meckoni, H. Balasubramanian</i>	
610237 - SUSTAINABLE AND RESILIENT INFRASTRUCTURE SYSTEMS.....	1238
<i>R. Obringer, R. Nateghi</i>	
552098 - EFFECT OF PIPETTE DESIGN ON MUSCULOSKELETAL LOADING ON HAND.....	1244
<i>E. Kim, F. Aqlan, A. Freivalds</i>	
553790 - NETWORK OPTIMIZATION FOR HYBRID LAST-MILE DELIVERY WITH TRUCKS AND DRONES.....	1250
<i>T. Cokyasar, W. Dong, M. Jin</i>	
563758 - MEMETIC ALGORITHM FOR OPTIMAL CONTROL OF ZIKA WITH BIFURCATION ANALYSIS.....	1256
<i>K. Bi, Y. Chen, C.-H. Wu, D. Ben-Arieh</i>	
564232 - INCORPORATING A SERVICE LEARNING TERM PROJECT IN AN ORIENTATION COURSE.....	1262
<i>C. Scherrer</i>	
567963 - OPTIMIZED SCHEDULING TEMPLATE IN A PEDIATRIC OUTPATIENT CLINIC.....	1268
<i>L. He, S. Kweon, S. Madathil, M. Khasawneh</i>	
569432 - OPTIMAL TAXING STRATEGY TO IMPROVE COMPETITIVENESS OF RENEWABLE ENERGY UTILITIES.....	1274
<i>Z. Matenga, J. Fedderke, J. Terpenny</i>	
569993 - DYNAMIC DELIVERY SLOT MANAGEMENT FOR E-COMMERCE ATTENDED DELIVERY THROUGH INCENTIVES.....	1281
<i>A. Vinsensius, D. Ng, E. Chew, L. Lee</i>	
573992 - FROM CYBER RESILIENCE TREND TO THE EFFICIENT CYBER SECURITY TECHNIQUE.....	1288
<i>L. Haghnegahdar, Z. Amjadi</i>	

574218 - A SAMPLE AVERAGE APPROXIMATION FOR FACILITY LOCATION CONSIDERING UNCERTAIN DEMAND.....	1294
<i>Z. Dong, S. Hu, R. Ji</i>	
575120 - HYBRID JOB-SHOP SCHEDULING WITH PREDETERMINED LOT SPLIT.....	1300
<i>A. Aryal, R. Logendran</i>	
577077 - DATA-DRIVEN PERFORMANCE: CHIEF DATA OFFICERS IN THE BIG DATA ERA.....	1306
<i>L. Whitman, R. Wang, M. Tudoreanu, N. Wu</i>	
577235 - EIGHT-STEP IMPROVEMENT ON A MATERIALS ENGINEERING LABORATORY CLASS.....	1311
<i>N. Nethada, H.-D. Wan</i>	
577268 - JOINT PRICING AND ALLOCATION DECISIONS IN A SUPPLY NETWORK.....	1317
<i>R. Gullu, M. Tabanli</i>	
577438 - NATURAL RESOURCES GOVERNANCE EMPLOYING BLOCKCHAIN-BASED DECISION-MAKING.....	1323
<i>F. Pour, A. Gheorghe</i>	
577515 - BI-LEVEL BRANCH-AND-BOUND ALGORITHM FOR THE CAPACITATED COMPETITIVE FACILITY LOCATION PROBLEM.....	1329
<i>V. Mahmoodian, H. Charkhgard, Y. Zhang</i>	
577620 - APPLYING MACHINE LEARNING TO TRACK MISINFORMATION DURING DISASTERS.....	1335
<i>K. Hunt, P. Agarwal, J. Zhuang</i>	
578689 - DEVELOPING CONTEXT-BASED WORK PLANNING POLICIES FOR INPATIENT CARE.....	1341
<i>L. Aragon, L. Cure</i>	
578890 - FACTORS AFFECTING PERFORMANCE MEASUREMENT IMPLEMENTATION: A SEM ANALYSIS.....	1347
<i>O. Oladimeji, H. Keathley-Herring, J. Cross</i>	
579273 - AUTOMATED LOCATION CLASSIFICATION OF MINING TRUCKS FROM GPS DATA.....	1353
<i>N. Priegnitz, J. Yoo</i>	
579557 - DIRECT JET PRINTING AND CHARACTERIZATION OF MICROCAPSULES FOR BIOMEDICAL APPLICATIONS.....	1359
<i>S. Parupelli, A. Aljohani, S. Desai, S. Khanal, N. Bhattarai</i>	
579565 - PROGRESSIVE MOBILITY AFFECTS HOSPITAL ACQUIRED CONDITIONS AND LENGTH OF STAY.....	1365
<i>J. Stone, D. Clayton, C. Hurley, R. Hammer, W. Cao</i>	
579670 - IMPROVING MOBILITY FOR COMMUTING OF WAREHOUSE WORKERS.....	1371
<i>M. Ozenua, N. Boland</i>	
579835 - INTERDEPENDENT CRITICAL INFRASTRUCTURE RESILIENCE EVALUATION FOR DIFFERENT FACILITY NETWORK CONFIGURATIONS.....	1382
<i>A. Tiong, H. Vergara</i>	

580200 - PEDAGOGY IN LARGE CLASSROOMS BEST PRACTICES	1388
<i>A. Elhabashy</i>	
580205 - OPTIMIZING PROCESS PARAMETERS UNDER UNCERTAINTY IN FUSED DEPOSITION MODELING	1395
<i>A. Dey, N. Yodo, B. Khoda</i>	
580250 - STAFFING AND SCHEDULING FRAMEWORK OF MERGED IR-CATHLAB DEPARTMENTS	1401
<i>A. Erekat, H. Sweidan, S. Mdathil, M. Khasawneh</i>	
580398 - PHYLOGENETIC-KRIGING TECHNIQUE REDUCES SEARCH-TIME OF AUTONOMOUS UNMANNED VEHICLES IN SIMULATION	1407
<i>V. Schrimpscher, S. Gholston</i>	
580804 - A MILP MODEL FOR ROAD RESTORATION AFTER A NATURAL DISASTER	1413
<i>S. Mhatre, X. Qu, L. Davis</i>	
580831 - PERFORMANCE OF MEDIAN U-TURN INTERSECTION FOR ALLEVIATION OF TRAFFIC CONGESTION	1419
<i>M. Rahman, Y. Zhou, J. Rogers</i>	
581382 - SURVEY STUDY OF UAVS IN THE CONSTRUCTION SECTOR: KNOWLEDGE, ATTITUDES, PRACTICE.....	1425
<i>B. Aydin, J. Yeon, E. Oh</i>	
581391 - ON COMPARING METHODOLOGIES TO SOLVING THE CAPACITATED NEWSVENDOR PROBLEM	1431
<i>P. Shan, L. Abdel-Malek</i>	
581447 - PREDICTIVE MODELING OF FOOD DONATIONS FOR CLIENT CHOICE FOOD PANTRIES.....	1437
<i>B. Morrow, L. Davis</i>	
581550 - BUILDING PERFORMANCE ONTOLOGY BASED ON PARAMETRIC DESIGN	1443
<i>M. Khazaeli, H. Estrada, L. Lee</i>	
581563 - ANALYZING VARYING COST STRUCTURES OF ALTERNATIVE WAREHOUSE STRATEGIES.....	1449
<i>K. Unnu, J. Pazour</i>	
581628 - RESILIENCE ENHANCEMENTS OF POWER DISTRIBUTION LINES USING COMPUTER VISION TECHNOLOGY.....	1455
<i>M. Alam, B. Tokgoz, Z. Zhu, J. Zhang, S. Hwang</i>	
581653 - ASSISTING HIGH SCHOOL DESIGN AND MANUFACTURING CURRICULUM DEVELOPMENT THROUGH RET.....	1461
<i>W. Zhu, X. Liu, X. Fan, N. Brake, X. Li, J. Zhou, D. Sisk, J. Yoo</i>	
581682 - MULTI-OBJECTIVE DECISION-MAKING METHOD OF SERVICE PORTFOLIO FOR ELECTRIC VEHICLE LEASE.....	1467
<i>Q. Li, R. Miao, J. Zhang</i>	
581720 - ENABLING INFORMATION SHARING IN SUPPLY CHAIN SYSTEMS USING BLOCK-CHAIN TECHNOLOGY	1473
<i>R. Zhang, W. Chan</i>	

582110 - STOCHASTIC MODEL FOR BIOMASS COFIRING NETWORK DESIGN INTEGRATING CLIMATE VARIABILITY	1479
<i>M. Aranguren, K. Castillo-Villar</i>	
582502 - A DEEP LEARNING APPROACH TO ADDRESS THE OPIOID CRISIS.....	1485
<i>N. Yousefzadeh, R. Sadeghian</i>	
582540 - SUPPLY CHAIN EVALUATION USING AN ASSET-BASED PROCESS	1491
<i>R. Robinson, P. Stanfield</i>	
582674 - MAXIMIZING IMPULSE REVENUE IN A RETAIL STORE CONSIDERING SHOPPER PATH	1497
<i>S. Hirpara, P. Parikh</i>	
582678 - MANAGING CONGESTION IN INLAND WATERWAY TRANSPORTATION NETWORK UNDER UNCERTAINTY	1503
<i>F. Nur, M. Marufuzzaman, S. Puryear</i>	
582706 - MODELING THE ERGONOMICS OF GOODS-TO-MAN ORDER PICKING	1509
<i>S. Shehhi, N. King, S. Amer, J. Mohammad</i>	
582766 - FEMICIDE IN MEXICO: AN APPROACH THROUGH SYSTEM DYNAMICS.....	1515
<i>A. Gonzalez, G. Gallego, G. Salazar</i>	
582807 - DESIGNING A PRODUCTION SYSTEM TO INTRODUCE NEW PRODUCTS IN STORES	1522
<i>S. Nunez-Servin, J. Pena-Ramos, K. Favela-Cuevas, G. Lazo-Quintanilla, I. Loera-Hernandez</i>	
583016 - DECREASING SPARE CAPACITY DUE TO HIGH NO-SHOW RATES.....	1527
<i>C. Kiassat, J. Fabian, L. Bacchiocchi</i>	
583028 - A FRAMEWORK FOR ASSESSING COST-SHARE NEGOTIATION TECHNIQUES USING COOPERATIVE GAMES	1533
<i>S. Dubey</i>	
583067 - A MULTI-STAGE OPTIMIZATION MODEL FOR FLEXIBILITY IN ENGINEERING DESIGN	1539
<i>R. Giahi, C. MacKenzie, C. Hu</i>	
583118 - ADVANCED INVENTORY PLANNING FOR HUMANITARIAN AND DISASTER RELIEF AIDS	1545
<i>B. Hamdan, P. Wang</i>	
583255 - NONPARALLEL HYPERPLANE SUPPORT VECTOR MACHINE-BASED FEATURE SELECTION FOR PATTERN RECOGNITION.....	1551
<i>Q. Zhang, H. Wang, Y. Li, S. Yoon</i>	
583259 - OPTIMAL OPPORTUNISTIC MAINTENANCE POLICY FOR A BUS ENGINE COOLING SYSTEM	1557
<i>A. Abbou, V. Makis, L. Paganin, N. Farooqi, S. Delesalle</i>	
583263 - AN AGENT-BASED SIMULATION WITH FACTORY PHYSICS PRINCIPLES TO TRAFFIC SYSTEMS.....	1563
<i>E. Lopez-Santana, J. Sanchez</i>	
583272 - BUILDING THE BIG STUFF—PLANES, TRAINS, SHIPS, ETC.	1569
<i>Q. Lee</i>	

583304 - DISCRETE EVENT SIMULATION-BASED SYSTEM ANALYSIS IN MAIL-ORDER PHARMACY AUTOMATION SYSTEM.....	1575
<i>Y. Li, Q. Zhang, S. Yoon</i>	
583337 - CLASSIFICATION OF R&D ACTIVITIES IN INDUSTRIAL ENVIRONMENTS.....	1581
<i>A. Elizondo-Noriega, N. Tiruvengadam, D. Guemes-Castorena, V. Tercero-Gomez, M. Beruvides</i>	
583369 - MULTI ECHELON SUPPLY CHAIN MODEL WITH A NEW RATIONING POLICY.....	1587
<i>M. Najjartabar-Bisheh, G. Nasiri, H. Davoudpour</i>	
610912 - BATTERY SELECTION FOR OPTIMAL GRID-OUTAGE RESILIENT PHOTOVOLTAIC AND BATTERY SYSTEMS	1594
<i>S. Tsianikas, J. Zhou, N. Yousefi, D. Coit</i>	
610948 - ADAPTIVE PARTITION-ENABLED PREPROCESSING FOR MULTISTAGE STOCHASTIC LINEAR PROGRAMS	1600
<i>M. Siddig, Y. Song</i>	
612253 - LEAD TIME QUOTATION WITH CONTINGENT ORDERS	1606
<i>R. Mallach, A. Muriel, T. Acworth</i>	
612372 - MARKOV-CHAIN MONTE-CARLO SAMPLING FOR OPTIMAL FIDELITY DETERMINATION IN DYNAMIC DECISION-MAKING.....	1613
<i>S. Masoud, B. Chowdhury, Y.-J. Son, R. Tronstad</i>	
615916 - A DECISION SUPPORT FRAMEWORK FOR AAC DEVICE SELECTION.....	1619
<i>M. Varghese, E. Perez, A. Schwarz</i>	
616139 - DEMAND RESPONSE IN BUILDING ENERGY MANAGEMENT VIA HVAC CONTROL.....	1625
<i>H. Mansy, S. Kwon</i>	
620054 - A STOCHASTIC PROGRAM WITH RECOURSE FOR DISTRIBUTING PERISHABLE MEDICAL SUPPLIES.....	1631
<i>L. Petrolanu, Z. Zabinsky, M. Resende</i>	
624283 - DATA-DRIVEN PROBABILISTIC SCENARIOS SIMULATION AND VISUALIZATION MODEL FOR HURRICANE IMPACTS.....	1637
<i>P. Mirchandani, K. Ayu, R. Maciejewski</i>	
627068 - STATISTICAL ANALYSIS OF PENALTY VS. INCENTIVE DESIGNS FOR HOSPITAL READMISSION.....	1644
<i>B. Lahijanlian, M. Alvarado</i>	
627250 - STOCHASTIC OPTIMIZATION OF LARGE-SCALE PATIENT EVACUATION BEFORE HURRICANES	1650
<i>K. Kim, E. Kutanoglu, J. Hasenbein</i>	
572344 - EXPECTED TRAVEL MODELS FOR RETAIL STORE ORDER FULFILLMENT	1656
<i>N. Zhang, J. Pazour</i>	

Author Index