

62nd Annual Conference and Expo of the Institute of Industrial Engineers 2012

**Orlando, Florida, USA
19-23 May 2012**

Volume 1 of 7

Editors:

G. Lim

J. W. Herrmann

ISBN: 978-1-63266-307-8

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© (2012) by the Institute of Industrial Engineers
All rights reserved.

Printed by Curran Associates, Inc. (2014)

For permission requests, please contact the Institute of Industrial Engineers
at the address below.

Institute of Industrial Engineers
3577 Parkway Lane, Suite 200
Norcross, GA 30092

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

www.iienet2.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: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

VOLUME 1

Development of a Decision Support System for Assisted Reproductive Technology (559)	1
<i>Shih-Min Chen, Kai-Ying Chen, Yuh-Ming Hwu, Chui-Yu Chiu</i>	
Development of a Web-based Maritime Safety Survey Data Analysis System (200)	10
<i>James Curry, Weihang Zhu, Brian Craig, Victor Zaloom</i>	
Using Geographic Information System in Municipal Waste Management (1076)	11
<i>Mikel Goicoechea, Itziar Goicoechea, Maria Fenollera</i>	
Quantitative Techniques for Soft sensor Information Fusion (697)	20
<i>David Sudit, Soundar Kumara</i>	
Nonlinear Modeling of Spiral Formation and Turbulent Patterns on Non-regular Surfaces (659)	21
<i>Yun Chen, Hui Yang</i>	
Natural Gas Price Forecasting via Selective Support Vector Regression (645)	22
<i>Andrea Viacaba, Mohammad H. Poursaeidi, Erhun Kundakcioglu</i>	
Complex Mathematical Model for Soft Processes in Information Fusion (1188)	31
<i>David Sudit, Soundar Kumara, David Hall</i>	
Kernel Fusion and Optimization in Quantitative Structure-Activity Relationship (QSAR) (1369)	41
<i>Changjian Huang, Li Zhang, Mark Embrechts</i>	
Prognostic Analysis of Hip Fracture in Elderly Women with Data Mining Methods (1200)	49
<i>Jongsawas Chongwatpol, Akkarapol Sa-Ngasoongsong, Patarawan Woratanarat, Paphon Sa-ngasoongsong</i>	
Staying Ahead of the Technology Curve by Understanding Organization Culture (1211)	59
<i>Shreya Kothaneth, Glenda Scales, Tonya Smith-Jackson</i>	
Practices Found in Customer Relationship Management in Small and Medium Businesses (866)	60
<i>María De León-Sigg, Juan Luis Villa Cisneros, Sodel Vazquez Reyes, Gabriela De Jesús Córdova Lara, Carlos Castañeda-Ramírez</i>	
Comparing Different Methods for Evaluating Usability of Website Interfaces (886)	66
<i>Kevin Krenk, Sara McComb</i>	
Extracting Information from Business Documents using Linguistic and Rule-Based System (919)	76
<i>Avimanyu Halder, Leili Javadpour, Mehdi Khazaeli, Gerald M. Knapp</i>	
Optimization of the Coherence of Textual Summaries (1329)	82
<i>Luis Cardona, Kristina Pestana, Vamsi Salaka, Nazrul Shaikh</i>	
Data-Driven Simulation Architecture for Material Handling System in Coal Mining (553)	83
<i>Chao Meng, Sai Srinivas Nageshwaraniyer, Amir Maghsoudi, Young-Jun Son, Sean Dessureault</i>	
A Hybrid Ontology Approach for Information Integration (76)	93
<i>Liyu Zheng, Janis Terpeny</i>	
Quasi-Recursive Correlation Dimension Analysis for Online Structural Health Monitoring (SHM) (566)	103
<i>Mahmoud Mistarihi, Zhenyu Kong, Satish Bukkapatnam, Tieming Liu, Tyler Ley</i>	
Novel Nanoinformatics Methods for Scaling up Atomistic-Scale Simulation of Carbon Nanotube Synthesis (691)	113
<i>Changqing Cheng, Satish Bukkapatnam, Lionel Raff, Ranga Komanduri</i>	
A Computationally Efficient Optimal Control Approach for Identifying System Dynamics (555)	122
<i>Jinkun Lee, Vittal Prabhu</i>	
Ambulance-initiated Dispatching by Centrality Principle in Emergency Medical Service (571)	123
<i>Seokcheon Lee</i>	
An Affect Rating System for Medical Speech Segment Detection (492)	133
<i>Ricardo Calix</i>	
STEM: A Platform for Modeling Complex Zoonotic Disease (1321)	134
<i>Kun Hu, Christian Thoens, Stefan Edlund, Matthew Davis, James Kaufman</i>	
DICE for Data and Knowledge Management in Virtual Manufacturing (10)	135
<i>Shugang Kang, Suvrajeet Sen</i>	
Optical Container Code Recognition and its Impact on the Maritime Supply Chain (557)	136
<i>Luis Rabelo, Ravindra Shetty, John Pastrana, Rebeca Caceres</i>	
Capabilities and Requirements Management for Net-Centric Enterprises (1011)	146
<i>Doug Bodner, Barry Boehm, George Edwards, Ivo Krka, Jo Ann Lane, Nenad Medvidovic, Bill Rouse</i>	
Analysis of Spatio-Temporal Mobility Patterns of Human Ensembles (999)	147
<i>Keith Thompson, Ion Florie Ho, Nathan Gnanasambandam, Sang Won Yoon, Sarah Lam</i>	
Selection and Matching of Kidney Donor and Recipient Using Fuzzy Techniques and Analytic Hierarchy Process (1001)	155
<i>Chanchal Saha, Jinghe Zhang Zhang, Sang Won Yoon, Mohammad Khasawneh, Krishnaswami Srihari</i>	
Retrospective Optimization for Oil Field Development under Geological Uncertainty (1093)	165
<i>Honggang Wang</i>	
Mining Transient vs. Non-transient User Movement Behavior in Urban Environments (1000)	166
<i>Ion Florie Ho, Keith Thompson, Nathan Gnanasambandam, Sarah Lam, Sang Won Yoon</i>	
Web-based Facility Monitoring by Facility Sensor Networks (1003)	175
<i>Hoo Sang Ko, Juan Wachs, Shimon Nof</i>	
Prediction of Disruptions in Supply Chain and Logistics Networks (1068)	184
<i>Xin Chen</i>	

Fast Detection of Overlapping Communities in Online Social Networks (1240)	185
<i>Akshay Ghurje, Soundar Kumara</i>	
Agent-Based Modeling of Patients' Hospital Choice and Bypass Behavior in Rural Areas (1002)	195
<i>Ying Han, Mohammad Khasawneh, Sang Won Yoon, Krishnaswami Srihari</i>	
Cluster Detection in Large-Scale Social Networks Using k-Plexes (1015)	203
<i>Zhuqi Miao, Baski Balasundaram</i>	
Assessment of Computer-aided Conceptual Design Tool for Sustainable Product Development (524)	213
<i>Junheung Park, Kyoung-Yun Kim, Keunho Choi</i>	
Corporate Memory: Design for Reducibility, Reusability and Recyclability (723)	214
<i>Hong-Fu Chuang, Tzu-Liang Tseng, Chun-Che Huang, San-Yuan Chen, Tzu-Ching Hsu</i>	
Interaction Network Based Concept Detection for Transformative Product Design (953)	224
<i>Keunho Choi, Kyoung-Yun Kim</i>	
Branch-and-Bound Algorithm for Interface-based Modular Product Design (1305)	225
<i>Anirudh Aryasomayajula, John Jung-Woon Yoo</i>	
Improving RFID System Reliability with Probabilistic Modeling (804)	226
<i>Takeaki Toma, David Porter</i>	
Quality Control of Bio Scaffold Using Intelligent Data Mining (1323)	227
<i>Tzu-Liang Tseng, Fuhua Jiang, Chun-Che Huang, Richard Chiou, Paras Mandal, Maria Gonzalez, Karthik Varma Koppella, Juan Saavedra</i>	
RFID Network Modeling and Optimization for Inventory Management (797)	237
<i>Atipong Suriya, David Porter</i>	
Critical Links for Demand Responsive Feeder Transit Services (594)	246
<i>Shailesh Chandra, Luca Quadrioglio</i>	
Upper-layer Survivability in Layered Networks with Lower-layer Capacity (1039)	247
<i>Zhili Zhou, Tachun Lin, Krishnaiyan Thulasiraman</i>	
Joint Routing, Gateway Selection, Scheduling and Power Management Optimization in Wireless Mesh Networks (1145)	256
<i>Onur Uzunlar, Kagan Gokbayrak, Emre Alper Yildirim</i>	
Industry/Government Panel Session on R&D Trends and Opportunities in CIS (562)	266
<i>Liyang Cui, Hari Thiruvengada, Joseph Dekeyrel</i>	
Comprehensive Testing Guidelines for Pavement According to the Risk of Premature Failure (564)	267
<i>S. Phil Kim, Seokcheon Lee, J. M. A. Tanchoco, Sijeong Gu, Tommy Nantung</i>	
Semantic Object Recognition for BIM Reverse Engineering (667)	268
<i>Mehdi Khazaeli, Leili Javadpour, Gerald M. Knapp</i>	
Outsourced Human Resource Management in Construction: Exploratory and bibliometric Study (596)	274
<i>Andre Simoes, Osvaldo Quelhas, Jose Rodrigues Farias Filho, Pedrita Gabriele</i>	
Risk Assessment of the Job Tasks for Heavy Equipment Operators (156)	283
<i>Ma. Cecilia Carlos, Honey Jericah Lucero</i>	
Ladder Task Performance and Mental Workload: A Scaled World Study (1158)	292
<i>Joseph Angles, Naeem Thompson, Gabrielle Trochez, Tonya Smith-Jackson</i>	
Requirements and Task Analysis of Fall Protection for Residential Construction (509)	293
<i>Joseph Angles, Akiko Nakata, Justin Morris, Gurjot Dhillon, Tonya Smith-Jackson, Daniel Hindman</i>	
Development of a Safety Climate Instrument for the Construction Supply Chain (447)	303
<i>Lance Saunders, Brian Kleiner, Tonya Smith-Jackson, Andrew McCoy, Kimberly Ellis, Christian Wernz</i>	
Identifying Safety Critical Decision Points in the Construction Lifecycle (449)	313
<i>Lance Saunders, Brian Kleiner, Andrew McCoy, Thomas Mills, Helen Lingard, Nick Blismas, Tracy Cooke, Ron Wakefield</i>	
Lean Construction Model Using Industrial Engineering Tools (1109)	323
<i>Diana Jaqueline Guerrero Galindo</i>	
Influence of Lean on Safety Risk Exposure in Modular Homebuilding (799)	324
<i>Joel James, Laura Hughes Ikuma, Isabelina Nahmens, Fereydoun Aghazadeh</i>	
Analyzing Perception of Safety in Construction Workers: a Cultural Perspective (775)	331
<i>Kaveri Thakur, Rupy Sawhney</i>	
Exposure to Nanoparticles During Asphalt Paving of Photocatalytic Asphalt Pavements (736)	338
<i>Heather Dylla, Somayeh Asadi, Marwa Hassan</i>	
Energy Rating Systems: A Case Study on Low-income Houses (1095)	347
<i>Siddarth Srinivasan, Isabelina Nahmens</i>	
Lessons Learned from Establishing a Center for Students with Disabilities at a Large Public University (1336)	354
<i>Wajdi Wazzan</i>	
Integrated Project Delivery Applied to the Rehabilitation of Ethnographic Buildings (849)	355
<i>Faustino Patiño Cambeiro, Maria Fenollera Bolibar, Juan Ignacio Prieto Lopez, Michelle Brodeschi</i>	
A Multi-Criteria Approach to Distributed Generation System Planning with Variable Power (165)	362
<i>Tongdan Jin, Yu Tian, Cai-Wen Zhang, David Coit</i>	
Demand Response in Stochastic Unit Commitment with Uncertain Generator Outage (264)	363
<i>Chaoyue Zhao, Qianfan Wang, Yongpei Guan, Jianhui Wang</i>	
On the Impacts of Plug-in Hybrid Electric Vehicle Penetration on Power Markets (49)	364
<i>Zhi Zhou, Jianhui Wang, Audun Botterud</i>	
Economic and Environmental Load Dispatching Framework using Particle Filtering (50)	372
<i>Juan Sáenz, Nurcin Celik, Hui Xi, Young-Jun Son, Shihab Asfour</i>	
Multistage Stochastic Optimal Operation of Energy-Efficiency Building (163)	382
<i>Yong Fu</i>	

A Smarter Real-Time Dispatch System for Power Grid with Wind Integration (164)	383
<i>Kwok Cheung</i>	
Generation Capacity Reserve Dispatch in Electricity Markets with Wind Power (760)	384
<i>Zhi Zhou, Audun Botterud</i>	
Agent-Based Modeling on Double-Sided Auction of Wind Power (937)	385
<i>Gong Li, Jing Shi</i>	
Evolutionary Agent Based Microstorage Management for a Hybrid Power System (1362)	393
<i>Nicolas Lopez, Jose Francisco Espiritu Nolasco</i>	
Energy Optimization using Boiler Controller (162)	394
<i>Ahad Ali, Donald Reimer</i>	
Energy Efficient Vehicle Routing Problem Using Traffic Impact Models (1205)	395
<i>Shokoufeh Mirzaei, Krishna Krishnan, S. Hossein Cheraghi</i>	
Optimal Solar PV Arrays Integration for Distributed Generation (185)	396
<i>Xueping Li, Olufemi Omitaomu</i>	
Prediction of Solar Radiation on Building Rooftops: A Data-Mining Approach (186)	405
<i>Olufemi Omitaomu, Budhendra Bhaduri, Jeffrey Kodysh</i>	
Path for Sustaining the Solar Value Chain in Tennessee (629)	413
<i>Girish Upreti, Kaveri Thakur, Bharadwaj Venkatesan, Rupy Sawhney</i>	
Electric Power Grid Designing Problem Considering Cascading Blackouts (223)	414
<i>Bo Zeng, Long Zhao</i>	
Compare Spinning Reserves and Risk Management Models for Stochastic Network-based Security Constrained Unit Commitment (224)	415
<i>Qipeng Zheng</i>	
Integrated Nuclear Generation Capacity Planning using Hybrid Modular Simulation (184)	416
<i>Juan Sáenz, Nurcin Celik</i>	
Two-stage Robust Optimization for Power Grid with Uncertain Demand Response (316)	426
<i>Chaoyue Zhao, Qianfan Wang, Yongpei Guan</i>	
Two-stage Robust Unit Commitment Problem (338)	435
<i>Ruiwei Jiang, Muhong Zhang, Yongpei Guan</i>	
Generation Planning under CO2 Uncertainties: A Real Options Approach (1048)	444
<i>Chung-Hsiao Wang, K. Jo Min</i>	
Impact of CO2 cap-and-trade Regulation on Electricity Generation Expansion (396)	445
<i>Felipe Feijoo, Tapas Das</i>	
Energy Management System using Policy Based Hierarchical Simulation Framework (558)	446
<i>Sadik Kucuksari, Esfandiyar Mazhari, Ryan Bloomfield, Young-Jun Son</i>	
Service Reliability and Lifecycle Cost Optimization of Solar Photovoltaic System with Uncertainty (528)	456
<i>Leann Sanders, Stephanie Lopez, Gregory Guzman, Jesus Jimenez, Tongdan Jin</i>	
Modeling and Simulation of Wind Farm Operations and Maintenance (1147)	457
<i>Eduardo Perez, Lewis Ntamo, Yu Ding, Eunshin Byon</i>	
Multi-Objective Optimization of Hybrid Power Systems Using Evolutionary Algorithms (1339)	458
<i>Nicolas Lopez, Jose Francisco Espiritu</i>	
Multi-criteria Evaluation of Bus Maintenance Testing Methods in Nuclear Power Plants (1353)	467
<i>Ertunga Ozelkan, Douglas W. Armstrong, James Sharkey</i>	
Algorithms for Power Grid Protection (36)	474
<i>Bo Zeng, Long Zhao, Wei Yuan</i>	
Transmission Expansion Planning with the Worst-Case N-k Contingency Criteria (39)	475
<i>Neng Fan, Watson Jean-Paul</i>	
Quantify Benefits of Energy Management Controllers under Dynamic Electricity Pricing (1198)	476
<i>Jingjie Xiao, Andrew Liu, Joseph Pekny</i>	
Optimal Charging Scheduling for Battery Electric Vehicles under Smart Grid (944)	477
<i>Nur Dayana Abd Rahman, Lihui Bai</i>	
Impact of Government Policies on Fuel Cells (826)	487
<i>Girish Upreti, Rupy Sawhney</i>	
A Framework for Analyzing Effects of Manufacturing Processes on Electric Vehicle Lithium-Ion Battery Reliability (688)	488
<i>Yong Wang, Lin Li, Qing Chang, Guoxian Xiao</i>	
Unified Formalism for Interactive Smart Grid Network (789)	489
<i>Jihoon Kim, Kyoung-Yun Kim</i>	
Application of Capability Maturity Models to Electric System Regulatory Compliance (1367)	490
<i>Joe Garmon, Tim Armstrong, James Barnard</i>	
Identifying the Contributors to the Cost of Nuclear Power Generation (867)	491
<i>Forest Denger, Vikram Thouta, Hillary Moore, Kevin Taaffe</i>	
Sustainable Single Machine Scheduling Problem with Reliability and Energy Consumption (636)	492
<i>Farnaz Ghazi Nezami, M. Bayram Yildirim, Pingfeng Wang</i>	
Forecasting Natural Gas Consumption By by Integration of Cluster Analysis And Time Series (374)	501
<i>Talayah Razzaghi, Yasaman Asadi, Reza Baradaran Kazemzadeh, Petros Xanthopoulos</i>	
A Minimum Relative Entropy-based Density Selection Scheme for Bayesian Estimations of Energy-related Problems (269)	502
<i>Xiaoran Shi, Nurcin Celik</i>	

Hybrid Power Systems Optimization using the Monkey Algorithm (1135)	512
<i>Carlos Ituarte-Villarreal, Nicolas Lopez, Jose Francisco Espiritu Nolasco</i>	
An Energy Efficiency Model for a Human Needs: Commute (1125)	513
<i>Chen Zhou, Kyungha Lim</i>	
Analysis of Skewness in Options Prices (1055)	514
<i>Ryder Cleary, Isaac Faber, Maxwell McDonnell, Nicholas Normandin</i>	
An Exploration of A Market Derived Risk Measure: Implied Distributions and Their Usefulness in Constructing Efficient Portfolios (386)	515
<i>Nicholas Normandin, Isaac Faber, Ryder Cleary, Maxwell McDonnell</i>	
Comparison of Historical Volatility and Options Based Implied Volatility in Constructing Efficient Portfolios (382)	522
<i>Maxwell McDonnell, Isaac Faber, Ryder Cleary, Nicholas Normandin</i>	
Time Valued Technology: Evaluating Infrastructure Replacement with Rapidly Emerging Technology (325)	531
<i>Kevin Ochs, Michael Miller, Alfred E. Thal Jr.</i>	
Is PW Useful for the Lorie-Savage Oil Pump Problem? (851)	541
<i>Ted Eschenbach, Gillian Nicholls, Neal Lewis</i>	
Capital Budgeting Technique for Non-Conventional Projects (590)	542
<i>Anastasia Kulakova, Nikolay Kulakov</i>	
What Are the Right Inputs for the WACC? (861)	550
<i>Ted Eschenbach, Neal Lewis, Mufu Weng</i>	
On Transforming an Engineering Economy Course for Full Online Delivery (1129)	551
<i>Luis Occeña, Pil Won On</i>	
Students' Perspective on the Effect of Economy on the Engineering Profession (1454)	552
<i>Lina Masad, Hamid Parsaei, Leticia Salter</i>	
2011 Wellington Award Lecture: Undergraduate Engineering Economy: Past Contributions, Present Status, and Future Direction (63)	553
<i>Jerome Lavelle</i>	
Analysis of Rail Transportation Costs Impact on Bioenergy Production System (292)	554
<i>Daniela Gonzales, Sandra Eksioglu, Erin Searcy, Md Roni</i>	
Interactive Discrete Event Modeling of Barrier Option Pricing (455)	555
<i>Juan Sáenz, Nurcin Celik</i>	
An Economic Evaluation Framework for Assessing Renewable Energy Projects (110)	565
<i>Olufemi Omitaomu, Adedeji Badiru</i>	
Evaluation of Technological and Environmental Impacts of Plasma Gasification Process for Waste-to-Energy (1290)	575
<i>Hsueh-Ming Steve Wang, Leslie Simmons, Anthony Nakazawa</i>	
Obtaining a Competitive Advantage in Global Sourcing Projects by Implementing Social Sustainability Metrics (1197)	576
<i>S. Jimmy Gandhi, Hsueh-Ming Steve Wang</i>	
Economic Rationality in Market Agents: Case Study of Mobile Telephone (634)	577
<i>Nestor Nova Arevalo, Wilson Pinzon Rueda</i>	
Economic Analysis For Two-Axis Photovoltaic System for an Indiana State University Building (289)	587
<i>Mahmoud Al-Odeh, Thomas Stergioulas, M. Affan Badar</i>	
Using Engineering Economy Principles to Compare and Predict the Safety Record of Two Major Oil-Related Incidents (657)	588
<i>Magdy Akladios, André Denoël Tonye</i>	
Trends in Engineering Economy Research (62)	589
<i>Joseph Hartman</i>	
Behavioral Economics: A State of the Art Matrix Analysis (543)	590
<i>Leonidas Guadalupe, Mario Beruvides</i>	
A Review of Economic Impact Analysis in Inland Waterway Transportation (819)	598
<i>Furkan Oztanriseven, Heather Nachtmann</i>	
Breakeven Volatility for Real Option Valuation (465)	599
<i>Neal Lewis, Gillian Nicholls, Liang Zhang, Joseph Hartman</i>	
Conjugate Distributions and Bayesian Copulas (751)	600
<i>Hemantha Herath, Pranesh Kumar</i>	
A Fuzzy Goal-Programming Approach for Optimal Product Family Design and Multiple Platforms Architecture (1047)	601
<i>Satish Tyagi, Kai Yang</i>	
Challenges in Life Cycle Cost Optimization of Existing Weapon Systems (646)	602
<i>Geert Letens, Baudouin Heuninckx, Peter Baelen</i>	
Life Cycle Assessment of Environment Impact of All Vanadium Redox Battery Electrolyte Production (21)	603
<i>Zhaohu Fan, James Moore, Xiaofeng Xie, Mansour Rahimi</i>	
When to Stop Beating a Dead Horse (1173)	604
<i>Ean-Harn Ng, James Simonton</i>	
Motivating the Study of Complexity in Engineering Education (1024)	605
<i>Claudina Vargas</i>	
An Admission Index for 1st-Year Students' Success at UPRM (690)	606
<i>Reyniel Lopez, Yazmin Ince, Sonia Bartolomei</i>	
Using the NASA-TLX to Assess First Year Engineering Problem Difficulty (992)	615
<i>Sarah Grigg, Sandra Garrett, Lisa Benson</i>	

Redesign of the Senior Project Course: Case Study (112)	625
<i>Fernando Aleu, Woodrow Winchester</i>	
The Value of Multidisciplinary Engineering Education After Graduation (1307)	626
<i>Melanie Ashton, Joseph Bailey, Nicole Coomber, Kylie Goodell, Kathryn Weiland</i>	
Rapid Improvement Events Across Rural Hospitals in the State of Montana (881)	637
<i>Durward Sobek, David Claudio, Carol Bischoff</i>	
American Manufacturing Needs and Universities Abilities to Meet Them (1121)	646
<i>M. Affan Badar, Todd E. Alberts, Patricia Polastri</i>	
Computer Applications to Enhance Engineering Knowledge and Skills in Students (327)	647
<i>Alejandro Teran</i>	
Teaching Response Surface Methodology using the Mouse Factory (887)	648
<i>Doug Timmer, Miguel González, Becky Vela, Connie Borrer, Douglas Montgomery</i>	
FOR-TSM: A Tool for Forecast with Time Series Models (530)	649
<i>Carlos Castro, Rosana Builes, Maria Cristina Bravo</i>	
Lessons Learned During the Implementation of a Virtual Manufacturing Laboratory (706)	659
<i>Maximo Ortega</i>	
Active Learning Implementation in Industrial Engineering Program Courses (1335)	660
<i>Wajdi Wazzan</i>	
Avoid Online Course Pitfalls with Delivery of Complex Materials (888)	661
<i>Colleen Phillips</i>	
Experiential Education and Problem Based Learning (PBL) for Sustainable Education (358)	669
<i>Hulya Yazici, Lisa Zidek</i>	
Enhancing Engineering Student Skills through Project-Based Learning (965)	670
<i>Cristina Pomales-García, Kenneth Cortes</i>	
Towards Developing a Framework to Assess Engineering Problem Solving Processes (1022)	676
<i>Ana Vila-Parrish, Dianne Raubenheimer</i>	
Replace Score Curving of Exams with Open Book Retake (977)	677
<i>Abdelrahman Rabie</i>	
Expert System Course Scheduler for ISE Undergraduate Students (1265)	678
<i>Dusan Sormaz, Saikishore Pulugurta, Danyu You</i>	
Multiple Criteria Model for Evaluating a Master Course Influence over Professional Skills of Alumni (1273)	679
<i>Livia Nepomuceno, Helder Costa</i>	
Modeling the Design Processes Leading to Innovative Outcomes: An Intervention Tool (1328)	687
<i>Nur Oze Ozaltin, Mary Besterfield-Sacre, Larry Shuman</i>	
Cultivating Adolescents in Systems engineering Habits (CASH): Minority Outreach Efforts (196)	688
<i>Carl White, Givon Forbes</i>	
A Markov Chain Model of Elementary Student Performance in Mathematics (635)	689
<i>Amy Craig Reamer, Julie Simmons Ivy, Robert Young, Ana Vila-Parrish</i>	
Emphasis on the Human Impact Potential of Engineering as Outreach (438)	690
<i>Christina Scherrer</i>	
Results from Engineering Entrepreneurship Minor within Industrial Engineering Curriculum (526)	696
<i>Joseph Wilck, H. Lee Martin, Xueping Li, Rupy Sawhney, Gautham Rajappa</i>	
Engineering Education and the Entrepreneurial Mindset (1379)	703
<i>Donald Reimer, Ahad Ali</i>	
Multiple Models of Entrepreneurship in University-Industry Partnerships (712)	704
<i>Barrett Caldwell</i>	
Continuous Improvement in the Design of an Industrial Engineering Laboratory (1043)	710
<i>Amalia Yaguez, Miguel Lopez</i>	
Optimizing Winter's Smoothing Constants and its Effect on Student Learning (5)	711
<i>Oscar Saenz</i>	
Evaluation of a Role-playing Simulation on Lean Principles and Methods (732)	712
<i>Juthamas Choomluksana, Toni Doolen</i>	
Academic Performance: Observations from Two Different Cultures (326)	722
<i>Alejandro Teran</i>	
Educating the Culturally-Sensitive Industrial Engineer (962)	728
<i>Viviana Cesani, Alexandra Medina-Borja</i>	
Key Aspects Related to Student Achievement in Engineering Education. (348)	729
<i>Bernard Van Wyk, Mukondeleli G. Kanakana, Jan H. C. Pretorius</i>	
Examination of Cognitive Dynamics in a Complex Collaborative Context (1238)	736
<i>Eric Lavetti, Sara McComb</i>	
The Impact of Network Structure, Conversational Churn, and Perceived Characteristics of Individuals on Innovation Output (297)	743
<i>Oguz Cimenler, Fethullah Caliskan, Kingsley Reeves Jr.</i>	
A Roadmap to Implement People Relationship Management in Organizations (384)	753
<i>Robert Ari Waker, Mario Mollo Neto</i>	
Cultural Issues in Engineering Management Distance Education (1141)	763
<i>Rita Engler, Greg Sedrick</i>	
Are We Making Progress? The MBNA Assessment Tool: Case Study (576)	764
<i>Fernando Aleu, Kim Gausepohl, Jason Dress, Carlos Santos</i>	

From Theory to Practice: "ProModeling" the Change (514)	765
<i>Craig Downing, Zachary Frey</i>	
Production Planning at a Rose Farm in the Bogota Plateau (1106)	775
<i>Gonzalo Mejia</i>	
Integrated Model of Flexibility and Efficiency in Production (879)	776
<i>Sandro Lordelo, Jose Rodrigues Farias Filho, Daniel De Souza, Perla Machado da Costa, Thais Guimaraes Vieira</i>	
An Objective Utility Aggregation Method for Group Decision Making (932)	786
<i>David Claudio, Gul E. Okudan Kremer, Andris Freivalds</i>	
Mathematical Model of Sub-System Interactions for Forward Operating Bases (58)	787
<i>Bhanuchander Reddy Poreddy, Benjamin Daniels</i>	
Long-Term Demand Prediction using Long-Run Equilibrium Relationship of Intrinsic Time-Scale Decomposition Components (943)	797
<i>Akkarapol Sa-Ngasongsong</i>	
Complexities in the Operating Room (1459)	807
<i>Patrick Garner</i>	
Multi-Objective Decision Analysis for Workforce Planning: A Case Study (169)	815
<i>Natalie Scala, Dennis Buede, Christopher Ciminera, Alicia Bridges, Richard Kutzner</i>	
The Human Factor: How Human Variability Affects Engineering Trade Analysis (170)	824
<i>Paul Compton, Gillian Nicholls, Robert Lord</i>	
Data-to-Decisions for Medical Technology Investments at Hospitals (171)	825
<i>Christian Wernz, Inga Gehrke</i>	
An Analysis of Risk Management Methods (714)	826
<i>Fatemeh Hosseinzadehdastak, Ryan Underdown</i>	
Knowledge Management as a Tool to Mitigate Weaknesses of Risk Management (718)	835
<i>Fatemeh Hosseinzadehdastak, Ryan Underdown</i>	
Risk Estimation: A Key Step in Risk Management (845)	843
<i>Ted Eschenbach, William Harper</i>	
Public-Private Partnership: Case Application for a Road-Accident Prevention Program (1244)	844
<i>Kongkiti Phusavat, Pornthep Anussornnitisarn</i>	
Integrating Change Literature: A Conceptual Model for Successful Organizational Change (1359)	845
<i>Serina Al-Haddad, Tim Kotnour</i>	
Continuous Process Improvement in an Outpatient Wound Clinic using Lean and Systems Engineering Tools (970)	846
<i>Ravi Uppal, Di Li, Shengyong Wang, Judy Fulton, Nancy Beinlich, Eliot Mostow, Robert Anthony, Linda Nice</i>	
The Relationship Between Maturity of Performance Measurement Systems and Maturity of Supply Chain Management (124)	856
<i>Guilherme Frederico, Roberto Antonio Martins</i>	

VOLUME 2

Virtual Team's Performance Measurement Revisited (337)	866
<i>Pedro Ferreira, Edson Pinheiro De Lima, Sergio E. Gouvea Da Costa</i>	
Performance Management in Healthcare: A Bibliometric Review (838)	875
<i>Andreia Pasqualini, Crislayne Plytiuk, Sergio E. Gouvea Da Costa, Edson Pinheiro De Lima</i>	
Case Study of Key Factors Driving Global Virtual Team Effectiveness (330)	885
<i>Pilar Pazos, Ana Canto, Nina Magpili</i>	
Enterprise Integration: A Case Study of a Psychological Healthcare Delivery System (443)	894
<i>Cody Kamin, Wiljeana Glover</i>	
Key Factors for Improving Project Team Performance (444)	895
<i>Wen-Hsing Liu, Jennifer Farris</i>	
Managing Performance in Turbulent Times (1441)	896
<i>Andy Neely</i>	
Project Complexity and Leadership Style Mismatch (905)	897
<i>Diane Van Scoter, Toni Doolen, Irem Tumer, Richard Malak, Douglas Van Bossuyt, Chuck Hsiao</i>	
Risk, Schedule and Costs in Project Management: A Bibliometric Analysis (802)	898
<i>Pedrita Gabriele, Jose Rodrigues Farias Filho, Miriam Martins, Alice Levi, Marcia Correia</i>	
Updating the Case Study for Complex Engineering Infrastructure Problems (220)	908
<i>Sean Schmidt, Suzanna Long, Kellie Grasman</i>	
Coupling Gough's Adjective Checklist Measures to Knowledge Management in Engineering Design Activities (219)	914
<i>Christiane Job, Dale Dirkse, Theodor Freiheit</i>	
Examining Teams as Dynamic Social Systems (834)	924
<i>Alison Schroeder, Ralitza Vozdolska, Sara McComb</i>	
The Impact of Online Collaboration Spaces on Virtual Team Outcomes (585)	933
<i>Anil Ustun, Pilar Pazos</i>	
Effectiveness in Executive Decision-Making Bodies: The Role of Conflict (611)	940
<i>Christopher Day, Pilar Pazos</i>	
Analysis of Energy Consumption at Scalable Contingency Basing (59)	948
<i>Mathew Thomas, Elizabeth Cudney, Steven Corns, Scott E. Grasman</i>	

Applying Incremental Validation to a Forward Operating Base Simulation Model (60)	956
<i>Jeremy Barnes, Alice Smith</i>	
Developing Resiliency and Scalability Metrics as Part of Contingency Basing Supply Chain Design (61)	957
<i>Amanda Gealy, Suzanna Long, Ahmet Soylemezoglu</i>	
A Multiple Criteria Model for the Management of Complex Engineering Network of Projects (781)	963
<i>Valdecy Pereira, Sandro Lordelo, Pedrita Gabriele, Jose Filho, Helder Costa</i>	
Integrating the Social and Environmental Dimensions of Sustainability in the Food Retail Value Chain: The DIA Case (870)	973
<i>Ruth Carrasco-Gallego, Ana Moreno-Romero</i>	
Buyer-Supplier Knowledge Sharing in a Service Supply Chain (336)	974
<i>Hulya Yazici</i>	
Innovating For The Future In Dutch Companies (78)	980
<i>Patrick Van Der Duin , Erik Van De Linde</i>	
Taxonomy for Generation of Blue Ocean Business Model with Scenario Technique (734)	990
<i>Volker Grienitz, André-Marcel Schmidt</i>	
Stakeholder Issues Along the Lifecycle in Global Hi-Tech Markets (539)	999
<i>Tamas Kopolyay, Douglas Lloyd, Lisa Sanchez</i>	
Panel: Collaboration Across Engineering Management Societies (1081)	1009
<i>Lucy Morse</i>	
Learning Organizations in Crisis Environments: Characteristics of Deployed Military Units (56)	1010
<i>Raffaella Di Schiena, Geert Letens, Jennifer Farris, Eileen Van Aken</i>	
Assessing the Evidence for Context-Sensitive Organizational Learning (248)	1021
<i>Lukasz Mazur</i>	
Leading From the Middle: Sustaining "Learning Pockets" to Building Learning Organizations (1088)	1022
<i>Jennifer Karlin</i>	
Investigating the Real Option Volatility Parameter (101)	1023
<i>Neal Lewis, Gillian Nicholls, Zhuoyuan Jiang</i>	
An Evaluation of Real Options Approach in Public-Private Partnerships (102)	1024
<i>Hongyan Chen, Ruwen Qin, Suzanna Long</i>	
Optimal Abandonment Decision for an Energy Portfolio under Uncertainty of Electricity Prices (205)	1034
<i>Jianjun Deng, Zhen Liu, Scott Grasman</i>	
Lean Leadership Readiness for Change: A Methodology for Lean Change Readiness and Continuous Improvement (738)	1041
<i>Michael Testani, Sreekanth Ramakrishnan</i>	
A Methodology to Assess an Organization's Lean Readiness for Change (739)	1051
<i>Sreekanth Ramakrishnan, Michael Testani</i>	
A Framework for Deploying Lean in Support Areas (1065)	1060
<i>Sathishkumar Selvaraju, Sreekanth Ramakrishnan, Michael Testani</i>	
Institutionalizing Strategic Thinking and Management Process (128)	1070
<i>Tim Kotnour</i>	
Enterprise Engineering Research: Characterization and Potential Future Directions (663)	1071
<i>Fernando Deschamps, Edson Pinheiro De Lima</i>	
Strategy Making in Hi-Tech Markets - The "Clock-Speed" Paradigm (538)	1081
<i>Douglas Lloyd, Lisa Sanchez, Tamas Kopolyay, Jean-Paul Pacquin</i>	
Component Sharing Methodologies in Product Development: A Review (274)	1091
<i>Bimal Nepal, Srividhya Sridharan</i>	
Application of Dynamic State Variable Models on Multiple-Generation Product Lines with Cannibalization across Generations (860)	1100
<i>Chun-Yu Lin, Gul Okudan</i>	
Mass Customization: Proposal for an Agenda Based on Social Network Analysis (684)	1110
<i>Andre Luiz Gazoli De Oliveira, Sergio E. Gouvea Da Costa, Edson Pinheiro De Lima</i>	
Society for Engineering and Management Systems Town Hall Meeting (1102)	1120
<i>Geert Letens, Eileen Van Aken, Jennifer Farris</i>	
A Significant Evolution of the Disaster Landscape (157)	1121
<i>Hans De Smet, Jan Leysen</i>	
A Heuristic Workforce Management System Model for High Uncertainty Environments (158)	1131
<i>Judy Wang, Wiljeana Glover</i>	
Human Performance Modeling As an Emergency Management Training Tool (159)	1132
<i>Susan Murray</i>	
Patient Centered Medical Home Transformation from Systems Engineering Perspective (82)	1133
<i>Mustafa Culcuoglu, Shengyong Wang, Chris Powers, Michael Hillman</i>	
A Case Study on Reducing Late First-Round Surgery OR Arrivals (381)	1141
<i>Jeff Hickel, Tim Talbot, David Claudio, Durward Sobek</i>	
A Hybrid Fuzzy Attribute Selection Model to Predict Readmission Risk (670)	1150
<i>Shaghayegh Norouzzadeh, Sang Won Yoon, Mohammad Khasawneh, Krishnaswami Srihari</i>	
Sustainability Operations Management: An Overview of Research Trends (48)	1158
<i>Carla Gonçalves Machado, Pamela Mocelin Manfrin, Edson Pinheiro De Lima, Wesley Vieira Da Silva, Cristiano De Oliveira Maciel</i>	

Design of Agile and Green Supply Chains (116)	1169
<i>Angelica Reis Galdino Takahashi, Luis Antonio De Santa-Eulalia, Gilberto Miller Dévos Ganga, Juliano Bezerra De Araujo, Rodrigo Cambiaghi Azevedo</i>	
Social Issues in Sustainable Supply Chain Networks: State of the Art and Further Research Directions (117)	1177
<i>Inmaculada Borrellá Alonso De La Torre, Ruth Carrasco-Gallego, Jaime Moreno Mateos, Carlos Mataix Aldeanueva</i>	
Assessment of the Relationship Between Implementation Climate and 'Lean' Behaviors (119)	1185
<i>Doug Hummer, Lukasz Mazur, Chad Lefteris, Heather Grant, Lawrence Marks</i>	
Manufacturers, Social Media and Marketing: Strange Bedfellows? (120)	1192
<i>Keanne Hoeg</i>	
A Multifaceted Approach to Enhance Patient Safety and Quality Improvement (121)	1193
<i>Bhisham Chera, Lawrence Marks, Lukasz Mazur</i>	
Process Improvement at a Newly-Established Emergency Department: A Kaizen Approach (83)	1194
<i>Ravi Uppal, James Natale, Adam Liszka, Shengyong Wang, Joyce Taylor</i>	
A New Approach to Kaizen Events in Healthcare: Kaizen Sessions (948)	1202
<i>Mustafa Culcuoglu, Shengyong Wang, Chris Powers, Michael Hillman</i>	
Lean Thinking in Healthcare: An Overview of Research Characteristics, Themes and Knowledge Groups (1998-2011) (742)	1211
<i>Crislayne Plytiuk, Andreia Pasqualini, Sergio E. Gouvea Da Costa, Edson Pinheiro De Lima</i>	
Model for Managers to Identify the Mentally-Departed Knowledge Worker (191)	1221
<i>Erick Jones, Vettrivel Gnanaswaran</i>	
A Complete Methodology to Simulate a Complex Healthcare System (410)	1226
<i>Anali Huggins, Matt Lovejoy, Lenore Page, Mahmudur Rahman, Garret Lommatsch, Andrew Miller, Spencer Green, David Claudio</i>	
Hospital Excellence Operation Model: An Approach to Lean Healthcare in Mexican Hospitals (532)	1235
<i>Miguel Angel Moreno, Abraham Mendoza</i>	
Determining the Value of Engineering Tasks (258)	1245
<i>Xiaoqi Zhang, Vincent Thomson, Yvan Beauregard</i>	
Productivity Improvement in New Product Development (1378)	1254
<i>Vincent Thomson</i>	
Three-Tier Loyalty Reward Schemes: An Analysis of the Conditions Under Which They Yield Optimal Profits (664)	1255
<i>Amir Gandomi, Saeed Zolfaghari</i>	
New Replenishment Policy for Deterioration Items in Green Supply Chain (878)	1256
<i>Zeinab Sazvar, Sayed Mohammad Javad Mirzapour Al-E-Hash, Armand Baboli, Mohammad Reza Akbari Jokar, Valérie Botta-Genoulaz</i>	
Quantifying an Organization's Human Factors Capability: Targeting World Class Integration (968)	1266
<i>Michael Greig, Patrick Neumann</i>	
Developing a Project Team Survey for Performance Evaluation (850)	1267
<i>Wen-Hsing Liu, Jennifer Farris</i>	
Evaluation of Freight Transportation Productivity Data Collection Methods and Reliability (1179)	1268
<i>Andrea Graham, Jamie Rogers</i>	
Applying Quick Changeover to Increase Productivity (550)	1276
<i>Jesus Gonzalo Palacios</i>	
Sustainable Indicators at Factory Level - A Framework for Practical Assessment (173)	1277
<i>Mats Winroth, Peter Almström, Carin Andersson</i>	
Bibliometric Study on Performance Measurement Systems and Sustainability (175)	1291
<i>Luciana R. Leite, Cintia A. Yagasaki, Eileen Van Aken, Roberto Antonio Martins</i>	
Assessment of Social Impacts of Lithium for Electric Vehicle Batteries (503)	1301
<i>Ona Egbue</i>	
Differences in Personality for Success in Mechanical Engineering vs. Engineering Design (218)	1308
<i>Theodor Freiheit</i>	
Learning to Define Lean Six Sigma Projects with Cases (1067)	1309
<i>Claudia Lizette Treviño, Alberto Hernandez-Luna, Víctor Tercero-Gómez</i>	
Lean Supply Chain Management: Practices and Performance Measures (652)	1319
<i>Everton Drohomerski, Sergio E. Gouvea Da Costa, Edson Pinheiro De Lima, Heloisa Wachholtz</i>	
Coordination, Supply Chain, Contract, Trust, Operations Research (1185)	1331
<i>Yahya Pezeshki, Armand Baboli, Naoufel Cheikhrouhou, Mohammad Modarres, Mohammad Reza Akbari Jokar, Jean-Pierre Campagne</i>	
Reinterpreting Mentoring and Culture: Layered Structures for Increased Productivity (1089)	1341
<i>Jennifer Karlin, Cassandra Groen, Eric James, Peter Franz, Logan Wiley, Michelle Kringen, Rebekah Keilholtz, Travis Buse, Jacob Leland</i>	
Studying the Impact of White Collar Interruptions (626)	1351
<i>Zafar Khan, Susan Murray</i>	
Lean Implementation in Scottish Small and Medium Sized Enterprises (SMEs): An Empirical Study (57)	1352
<i>Jiju Antony</i>	
Application of Lean Sigma in a Belgian Medium Sized Confectionery: A Case Study (71)	1360
<i>Maneesh Kumar, Manoj Dora, Dirk Van Goubergen, Adrienn Molnar, Xavier Gellynck</i>	
Improving Flow in Healthcare Clinics Through Simulation (132)	1361
<i>Elizabeth Cudney, Devan Scroggins, Susan Murray, Abhijit Gosavi</i>	
A New Proposal to Classify World Class Manufacturing (661)	1371
<i>Christian Ferreira, Sergio E. Gouvea Da Costa, Andre Luiz Gazoli De Oliveira, Edson Pinheiro De Lima</i>	

World Class Manufacturing Concepts in the Last Three Decades (660)	1379
<i>Christian Ferreira, Andre Luiz Gazoli De Oliveira, Edson Pinheiro De Lima, Sergio E. Gouvea Da Costa</i>	
An Empirical Analysis of Supply Chain Maturity in Healthcare Providers (890)	1388
<i>Brian Smith, Heather Nachtmann</i>	
Comparing Education and Training Requirements for Retail and Healthcare Supply Chain Professionals (839)	1389
<i>Mohammad Shbool, Edward Pohl, Manuel Rossetti, Heather Nachtmann, Morgan Ulesich</i>	
Adoption of GS1 Data Standard in Pharma and Specialized Units Operations of Healthcare Providers (1007)	1390
<i>Vijith Varghese, Ronald Rardin, Nebil Buyurgan, Angelica Burbano, Mehmet Kilinc, Paiman Farrokhvar, Eghbal Rashidi</i>	
A Bi-objective Model for the Retail Spatial Design Problem (417)	1391
<i>Alice Smith, Haluk Yapicioglu</i>	
Evaluating Mixed-Width Aisles for Order Picking (418)	1392
<i>Corinne Mowrey, Pratik Parikh, Russell Meller, Kevin Gue</i>	
Integrated Inventory Replenishment and Vehicle Routing with Random Consumption (427)	1393
<i>Ronald Askin, Mingjun Xia</i>	
Placement of Two Finite Size Facilities in a Layout with Existing Facilities with Rectilinear Travel (419)	1394
<i>Ketan Date, Rakesh Nagi</i>	
Creating Virtual Picking Cells for Forward Storage in Distribution Centers (420)	1395
<i>Daniel Olander, Dale Masel</i>	
Monitoring Inventory Accuracy in Large Retail Environments (421)	1396
<i>John English, Andrew Huschka</i>	
A Tailored Primal-dual Interior-point Method for Facility Layout Problem with Relative-positioning Constraints (699)	1397
<i>Shunichi Ohmori</i>	
Comparison of Alternative Configurations for Dense Warehousing Systems (785)	1398
<i>Don Taylor, Kevin Gue</i>	
Batch Picking in Narrow-aisle Order Picking Systems with Consideration for Picker Blocking (1356)	1399
<i>Soondo Hong, Andrew Johnson, Brett Peters</i>	
Integrating Analysis in Warehouse Design Workflow (425)	1400
<i>Leon McGinnis, Steffen Schieweck, Tim Skrotzki, Martin Thormann</i>	
Performance Trade-offs in Layouts for Distribution of Bulk Relief Supplies (1343)	1401
<i>Ananth Krishnamurthy, Debjit Roy, Sanket Bhat</i>	
The Unequal Area Facility Layout Problem with Relaxed Flexible Bays (1455)	1402
<i>Sadan Kulturel-Konak</i>	
A Simulation Study on the Performance of Multiple Load AGVs (426)	1403
<i>Takashi Irohara, Hideaki Yamashita</i>	
GridPick: A Dynamic Pick Face for Order Fulfillment (428)	1404
<i>Kevin Gue, Onur Uludag</i>	
A Warehouse Model for Replenishment to a Bottom-Level Forward Area with Random Storage (470)	1405
<i>Lisa Thomas, Russell Meller</i>	
Analysis of a Complex Multi-Product Material Flow System of a Large Chemical Manufacturer (548)	1406
<i>Phichet Wutthisirisart, Mustafa Sir, James Noble</i>	
Performance Metrics Analysis for Aircraft Maintenance Process Control (549)	1413
<i>Kevin Taaffe, Robert Allen</i>	
Comprehensive Tactical Supply Chain Planning Under Uncertainty (439)	1414
<i>Aly Megahed, Marc Goetschalckx</i>	
A Closed Queueing Network Approach to Analyzing Multi-vehicle Material Handling Systems (440)	1415
<i>Dima Nazzal</i>	
Parameter Tolerance in Queueing Models (489)	1416
<i>Ying Tat Leung, Manjunath Kamath, Juan Ma</i>	
Smartphone Adoption in Home Health Care Industry (300)	1417
<i>Mehmet Kilinc, Nebil Buyurgan</i>	
Quantifying Nurse Involvement in the Home Health Supply Chain (301)	1418
<i>Ashlea Milburn, Scott Mason, Jessica Spicer</i>	
An Effective Methodology for Routing Home Health Care Nurses (302)	1419
<i>Michael Hewitt, Nisha Nataraj</i>	
Impact of Primary Care No-Show on Hospital Use for Diabetics (716)	1420
<i>Mark Lawley, Ayten Turkcan, Laura Sands, Lynn Nuti, Zhiyi Tian, Karen Chang, Dede Willis, Lingsong Zhang</i>	
Estimating Individualized Diabetic Complication Risk (720)	1421
<i>Yan Li, Nan Kong, Mark Lawley</i>	
Predictive Mining to Estimate Diabetes Factors among Native American Elders (900)	1422
<i>Sudhi Upadhyaya, Jing Shi, Twyla Baker-Demaray, Marilyn Klug</i>	
Nurse Scheduling Problem in an Operating Suite: A Heuristic Approach (383)	1431
<i>Arezou Mobasher, Gino Lim</i>	
Operating Suite Nurse Scheduling Problem: A Column Generation Approach (385)	1440
<i>Gino Lim, Arezou Mobasher</i>	
Proactive Operating Room Management by Using Simulation (1160)	1450
<i>Jihan Wang, Hakimuddin Neemuchwala, Alper Murat, Kai Yang</i>	
Response Strategies for Critical Healthcare Supply Shortages (812)	1451
<i>Christopher Adkins, Chase Rainwater, Erhun Kundakcioglu</i>	

Data Standards' Impact in Recall/Outdate Management in Healthcare Supply Chain (507)	1452
<i>Paiman Farrokhvar, Nebil Buyurgan, Ronald Rardin, Vijith Varghese</i>	
Levels, Readiness and Impacts Model for Data Standard Adoption in Pharma and Specialized Units Operations of Healthcare Providers (1006)	1453
<i>Vijith Varghese, Ronald Rardin, Nebil Buyurgan, Angelica Burbano, Mehmet Kilinc, Paiman Farrokhvar, Eghbal Rashidi</i>	
Identifying Patient and Hospital Factors to Reduce Preventable Readmissions (780)	1454
<i>Florentino Rico, Jose Zayas-Castro, Jingyi Zhu, Lingsong Zhang, Fang Yi, Hong Wan</i>	
Using Artificial Neural Network in Length of Hospital Stay Prediction at the Admission Stage for Cardiology Patients (18)	1455
<i>Hao-Yuan Song, Pei-Fang Tsai, Fu-Man Lin</i>	
Framework for Implementing Best Practice in Military Health (1144)	1456
<i>Caitlin Hawkins, Shinyi Wu</i>	
A Decision Tool for Nurse-to-Patient Assignment on A Hospital Unit (982)	1457
<i>Ilgin Acar, Steven Butt</i>	
Long-Term Cost-Effectiveness of Treating Depression for Diabetes Patients (467)	1458
<i>Magaly Ramirez, Shinyi Wu</i>	
Designing a Telehealth-facilitated Depression Care Management for Safety-Net Diabetes (1326)	1459
<i>Shinyi Wu, Irene Vidyanti, Caitlin Hawkins, Pai Liu</i>	
Efficient Assembly of Health Information Using EHR in Primary Care (1318)	1460
<i>Shinyi Wu, Fei Li, Nan Cheng</i>	
Patient Classification and Staffing in Outpatient Oncology Clinics (1299)	1461
<i>Ayten Turkcan, Bohui Liang</i>	
Analysis of Patient Flow in Radiation Oncology Department of Central Baptist Hospital Using Discrete Event Simulations (546)	1462
<i>Junwen Wang, Jingshan Li, Anne Cambell, Kimberly Prather, Barbara Johnson, Kay Ross</i>	
Determining Patient Flow and Resource Utilization (510)	1472
<i>Monica Puertas, Courtney Feliciani, Serkan Gunpinar, Jose Zayas-Castro, Bo Zeng, Peter Fabri</i>	
Outcome-Based Resource Utilization Assessment (324)	1473
<i>Jennifer Mendoza-Alonzo, Jose Zayas-Castro, Peter Fabri</i>	
Antiviral Resistance Simulation of Pandemic Influenza (442)	1474
<i>Sandro Paz, Alex Savachkin</i>	
Interactions of Non-pharmaceutical Intervention Parameters with Virus Epidemiology and Social Behavior (906)	1475
<i>Dayna Martínez, Tapas Das</i>	
Cost-Effectiveness Analysis of Different Intervention Strategies for Stochastic Susceptible-Infective Model: A Household View (88)	1476
<i>Hamed Yarmand, Julie Simmons Ivy</i>	
Engineering Tools for Optimizing Computer Requirements for Implementing Electronic Medical Records throughout a Healthcare Facility (1361)	1486
<i>Claire Bond, James Benneyan, Mehmet Erkan Ceyhan</i>	
Observation Policies for Patient and Resource Tracking in Outpatient Clinics (1400)	1487
<i>Houshang Darabi, Ashkan Sharabiani</i>	
Prioritization of Hospital Laboratory Orders Considering Cancellations Probabilities (600)	1488
<i>Artem Ghavrish, Mustafa Sir, Kalyan Pasupathy</i>	
Predicting Ovarian Cancer Risk Using Bayesian Multivariate Probit Model (769)	1495
<i>Mehrnaz Abdollahian, Tapas Das</i>	
Analytic Modeling of Breast Cancer Spontaneous Regression (1078)	1496
<i>Shengfan Zhang, Julie Simmons Ivy</i>	
Real-time Data Collection Strategies for Epidemiological Characterization of Pandemic Outbreaks (1117)	1502
<i>Diana Prieto</i>	
Modeling and Monitoring Challenges in Detecting and Managing Disease Outbreaks (1402)	1503
<i>Ross Sparks</i>	
Radiology Procedure Time Slot Redesign to Improve Scheduling Efficiency (665)	1504
<i>Justin Marcak, Yu-Li Huang</i>	
A Location-Allocation Model for Public Health Facilities to Optimize Outpatient Coverage (967)	1510
<i>Rodolfo Mendoza Gómez, Karla Valenzuela, Paola Zepeda</i>	
A Study of Reschedule Rate's Influence on Patient's Waiting Time (1097)	1511
<i>Muyuan Li, Serge Sala-Diakanda, Jose Sepulveda</i>	
Using Simulation to Improve Patient Access and Reduce Cost (1180)	1512
<i>Tom Rust, Khalid Saeed, Sharon Johnson</i>	
Radiation Therapy Beam Angle Optimization Methods: A Comparison Study (122)	1522
<i>Gino Lim, Laleh Kardar, Wenhua Cao, Abhilasha Kelkar</i>	
Radiation Dose Optimization for Critical Organs in Interventional Radiology Procedures (1278)	1529
<i>Yasaman Khodadadegan, Muhong Zhang, William Pavlicek</i>	
Learning From Terrorist Networks: Innovative Models for Cancer Discoveries (641)	1539
<i>Mary McGuire, Gino Lim, Robert Brown</i>	
Determining Optimal Resource Levels in Surgical Services using Multi-objective Simulation Optimization (928)	1540
<i>Rung-Chuan Lin, Mustafa Sir, Kalyan Pasupathy</i>	
A Stochastic Mathematical Programming Model for Elective Patient Scheduling (1030)	1541
<i>Ergin Erdem, Xiuli Qu, Jing Shi, Gong Li</i>	

The Development and Validation of the Workload Indicator for Nursing (23)	1549
<i>Dries Mynj, Dirk De Bacquer, Ann Vanhecke, Dimitri Beeckman, Sofie Verhaeghe, Dirk Van Goubergen</i>	
Real-Time Decision Support System for Dispensing Medical Supplies (896)	1550
<i>Sunderesh Heragu, Gerald Evans, Yepeng Sun, Phani Polina, Trivikram Rao</i>	
Handling Data Inaccuracy in Healthcare Inventory Management (1392)	1551
<i>Selen Isci, James Benneyan</i>	
Shared Inventory Within and Between Healthcare Facilities (1393)	1552
<i>Natassia Taylor, James Benneyan</i>	
Modeling Cost and Revenue and Patient Treatment Progression in ICUs (430)	1553
<i>Jeffrey Herrmann, Shah-An Yang</i>	
An Intelligent Decision Support System for Hospital Admission Management (19)	1554
<i>Po-Chia Chen, Pei-Fang Tsai, Hong-Jyun Chen, Fu-Man Lin</i>	
Evaluating the Indexed Productivity Output of Hospitals (1165)	1555
<i>Shivon Boodhoo, Sanchoy Das</i>	
Are Staff in Rural Healthcare Facilities Ready for EHRs? (1225)	1556
<i>Yuan-Han Huang, Sandra Garrett, Kevin Taaffe, Anand Gramopadhye</i>	
Long Term Care Status Transition among Elderly Wisconsin Medicaid Recipients (398)	1566
<i>Elise Wu, Jim Robinson, David Zimmerman</i>	
Applying Information Alignment Principles to Healthcare Delivery Coordination (713)	1567
<i>Barrett Caldwell</i>	
A Framework for Medical Service Collaboration using Medical Coding System (728)	1568
<i>John Jung-Woon Yoo, Krishnaveni Gnanasekaran</i>	
Efficiency in Pre-defined Hospital Networks for Disasters. A Methodological Approach (858)	1577
<i>Maria T. Bull, Jose Sepulveda</i>	
A Dynamic Network Disaster Evacuation Model to Transport Multi-Priority Patients (650)	1587
<i>Hyeongsuk Na, Amarnath Banerjee</i>	
An Approach for Dispatching EMS Vehicles (1114)	1597
<i>Sunderesh Heragu, Lihui Bai, Farshad Majzoubi</i>	
Estimating Surgery Time (754)	1598
<i>Ali Hajiaghazorgi, Jose Sepulveda</i>	
Prediction of Surgical Case Duration Using Support Vector Regression Models (1230)	1599
<i>Marbelly Davilal, Grisselle Centeno</i>	
Predictive Appointment No-Show Modeling Development in a Pediatric Clinic (656)	1600
<i>Yu-Li Huang, David Hanauer</i>	
Effects of Air Pollutants and Meteorological Variables on Asthma Prevalence (199)	1601
<i>Erica Cosme Negron, Nazario Ramirez</i>	
FMEA Analysis of a Surgery Department Supply Chain (632)	1602
<i>Farnaz Ghazi Nezami, Hessamedin Vali, M. Bayram Yildirim</i>	
The Impact of Physician Bias on Medical Supply Chain Management (986)	1603
<i>Lakausha Simpson, Paul Stanfield</i>	
A Multi-Criteria Medicament Vendor-Selection Method Embedded in a Constrained Healthcare context (1303)	1604
<i>Isidro M. Cristobal-Vazquez, Fernando Napoles</i>	
Scheduling Outpatients in Presence of Randomly Right-Censored Data (882)	1605
<i>Ciro Alberto Amaya, Julian Alberto Ortiz Giraldo</i>	
Scheduling Capacity to Physician Groups in Ambulatory Surgical Facilities (1332)	1606
<i>Xuanqi Zhang, Sanchoy Das</i>	
Reducing Service Time Variation in Patient Appointment Group through Reclassification (658)	1607
<i>Yu-Li Huang</i>	
System Engineering Approaches on Military Healthcare System in Enterprise Architecture Framework (1426)	1608
<i>Mehmet Erkan Ceyhan</i>	
Optimal Longitudinal Relocation of Colonoscopy Services within the Veterans Health Administration (282)	1609
<i>Onur Uzunlar, Mehmet Erkan Ceyhan, James Benneyan, Brian Shiner, Bradley V. Watts</i>	
Real-time Operation Room Workflow Management (1085)	1619
<i>Xiaoyu Ma, Kai Yang, Pamela Reeves, Susan Yu</i>	
Decision Making about Surgical Treatment for Rotator Cuff Tear Patients Based on Patients' Clinical Examination (1330)	1620
<i>Kamran Paynabar, Drew Donnell, Christopher Gatti, Theresa Kijek, Alem Jacob, Judy Jin, Bruce Miller, James Carpenter, Richard Hughes</i>	
A Classification Model to Identify Hospice Candidates in Terminally Ill Patients (1227)	1621
<i>Eleazar Gil-Herrera, Ali Yalcin</i>	
Exploration of Group Technology Applications: Triage in the Emergency Department (811)	1622
<i>Omar Ashour, Geoffrey Silvera, Gul E. Okudan Kremer, Madhu Reddy</i>	
Process Flow Development for a State-wide Research Permissions Management System. (166)	1632
<i>Kapil Chalil Madathil, Yuan-Han Huang, Reshmi Koikkara, Anand Gramopadhye</i>	
RFID-Based Healthcare Workflow Management in Sterile Processing Department (1084)	1639
<i>Xiaoyu Ma, Kai Yang, Pamela Reeves, Susan Yu</i>	
Understanding the Work System at Anticoagulation Clinics (651)	1649
<i>Mustafa Ozkaynak, Adam Rose, Sharon Johnson, Bengisu Tulu</i>	
Optimal Screening for Preclinical Diseases (458)	1650
<i>Ang Li, Georgia-Ann Klutke</i>	

Spatial Modeling of Noncompliance with Diabetic Retinopathy Screening in California (323)	1651
<i>Irene Vidyanti, Shinyi Wu</i>	
Integrated Simulation Modeling for Screening of Diabetic Retinopathy (1322)	1661
<i>Irene Vidyanti, Shinyi Wu</i>	
Analyzing the Factors Influencing Women's Participation in Mobile Mammography Program (733)	1662
<i>Mahboubah Madadi, Shengfan Zhang, Michael Preston, Ronda Henry-Tillman</i>	
Improving Patient's Flow at Emergency Rooms Applying IE Tools (366)	1663
<i>Francisco Ramis, Jose Sepulveda, Liliana Neriz</i>	
ER Circle Time Study through Simulation Modeling in a Hospital Layout (941)	1664
<i>Ting-Liang Chien, Yu-Li Huang</i>	
Modeling a Hospital Emergency Department Using a Closed Queueing Network (945)	1665
<i>Yang Liu, Sunderesh Heragu, Gerald Evans</i>	
Surgery Scheduling for Multiple Operating Rooms under Uncertainty and Resource Constraints of Post-Anesthesia Care Units (764)	1672
<i>Sangbok Lee, Yuehwern Yih</i>	
Design of a Surgical Library for Scheduling Operating Rooms (1319)	1681
<i>Marbelly Davila, Grisselle Centeno</i>	
Enhancing Endoscope Reprocessing within the VA Health System (746)	1682
<i>Bryan Norman, Bopaya Bidanda</i>	
Simulation-based Resource Planning for in-house Delivery of Employee Healthcare Services (729)	1683
<i>Hao Huang, Joseph Heim, Zelda Zabinsky, Shabnam Zangeneh-Khamooshi, Monica Wellner, Mike Astion, Doris Cruz, Jeanne Vincent, Rhona Jack</i>	
An Agent-based Simulation Model to Study Accountable Care Organizations (686)	1684
<i>Pai Liu, Shinyi Wu</i>	
Using Simulation to Guide Cost-effectiveness Analysis: A Unique Case in Regenerative Medicine (6)	1694
<i>Sean Carr, Stephen Roberts</i>	
Modeling the Costs of Sugar-Sweetened Beverages to Health Care (595)	1703
<i>Andrea Hupman, Ali Abbas</i>	
Complex Adaptive Systems and Trauma Centers: Decision Making Under Stress (42)	1711
<i>Policarpo de Mattos, Daniel Miller, Eui Park, Younho Seong</i>	
Conceptual Design of a Decision Support System for Child Abuse Risk Evaluation (783)	1712
<i>Alex Foldenauer, Kevin Donaldson, Tonya Smith-Jackson, Isabel Bradburn</i>	
Evaluating Nuclear Facility Security Candidate Enhancements (854)	1720
<i>Jessica Rodgers, Justin Yates</i>	
Protecting Critical Infrastructures from Intentional Attacks under Stochastic Conditions (1375)	1728
<i>Chi Zhang, Jose Ramirez-Marquez</i>	
Applying the Model-Based Vulnerability Assessment Technique to Interdependent Infrastructures (598)	1729
<i>Vhance Valencia, Alfred E. Thal Jr.</i>	
An Evolutionary Game Theory Approach for Intelligent Patrolling (1376)	1738
<i>Oswaldo Aguirre, Heidi Taboada Jimenez, Jose Francisco Espiritu Nolasco</i>	
A Game-theoretic Vulnerability Model to Address Cascading Failure and Restoration Time (560)	1739
<i>Sinan Tas, Vicki M. Bier, Janghoon Kim</i>	

VOLUME 3

Game-Theoretic Analysis of Attack and Defense in Cyber-Physical Network Infrastructures (1251)	1749
<i>Fei He, Jun Zhuang, Nageswara Rao</i>	
Subsidizing to Disrupt a Terrorism Supply Chain - A Four-player Game (1297)	1757
<i>XiaoJun Shan, Jun Zhuang</i>	
Analysis of Inland Waterways Disruptions on Interdependent Economic Systems (842)	1758
<i>Raghav Pant, Kash Barker, Thomas Landers</i>	
A Dynamic Decision Model for Port Hurricane Preparation and Shutdown (515)	1768
<i>Christopher Baker, Raquel Teasley, Lauren Davis, Xiuli Qu</i>	
Analysis of Post-Disaster FEMA Reconstruction Grants and Coastal Residential Resiliency (291)	1778
<i>Henry Lester, Gary Moynihan</i>	
A Review of Cargo Prioritization Techniques within Inland Waterway Transportation (477)	1779
<i>Jingjing Tong, Heather Nachtmann</i>	
An Empirical Study on Risk Mitigation in Transporting Hazardous Material (951)	1789
<i>Ayodeji Lasisi, Lihui Bai, Zhihui Sun</i>	
Structure-aware Vehicle Routing to Minimize Aggregate Response Time (1247)	1799
<i>Sijeong Gu, S. Phil Kim, Seokcheon Lee, J. M. A. Tanchoco</i>	
Homeland Air Surveillance - How to Optimize Coverage (105)	1800
<i>David Denhard</i>	
Adaptive Adversary Modeling for DHS Terrorism Risk Assessment (106)	1810
<i>Barry Ezell, Dennis Buede</i>	
Protecting the U.S. Homeland from an EMP Threat (429)	1811
<i>William Nanry</i>	
An Information-based Rerouting Decision Making Tool for Regional Evacuation (705)	1812
<i>Mohammad Reza Baharnemati, Gino Lim</i>	

Predicting the Diffusion of Information about an Anthrax Attack (94)	1822
<i>Jeffrey Herrmann, William Rand</i>	
Designing Optimal Aviation Baggage Screening Strategies Using the Monkey Algorithm (1136)	1823
<i>Aaron Martinez, Edgar Jimenez, Jose Francisco Espiritu Nolasco</i>	
Solving the Aviation Baggage Screening Problem Using Genetic Algorithms (108)	1824
<i>Anuar Aguirre, Jose Francisco Espiritu, Heidi Taboada Jimenez</i>	
Robust Multi-Stage Optimization for Post-Disaster Economic Recovery Planning (844)	1833
<i>Raghav Pant, Kash Barker, Thomas Landers</i>	
Development of Patrolling Schemes for Improved Border Security Performance through an Evolutionary Approach (1374)	1834
<i>Mohammed Muaafa, Jose Ramirez-Marquez</i>	
Optimal Resource Allocation for Recovery of Interdependent Systems: Case Study of the Deepwater Horizon Oil Spill (1063)	1835
<i>Cameron Mackenzie, Hiba Baroud, Kash Barker</i>	
A Multiobjective Inoperability Decision Tree for Infrastructure Preparedness (620)	1845
<i>Hiba Baroud, Kash Barker</i>	
Capacitated Facility Location for Emergency Response (1377)	1846
<i>Ivan Hernandez, Jose Ramirez-Marquez</i>	
Models for Disaster Relief Shelter Location and Supply Routing (369)	1847
<i>Ashlea Milburn, Chase Rainwater</i>	
Mitigating Risk in Multi-Modal Perishable Commodity Supply Chain Networks (370)	1848
<i>Dia St. John, Ashlea Milburn, Edward Pohl, Chase Rainwater, Juliana Bright</i>	
Designing Resilient and Sustainable Supply Chain Networks (918)	1849
<i>Ridvan Gedik, Edward Pohl, Chase Rainwater, Scott Mason, Hugh Medal</i>	
Optimization of Influence Allocation within a Social Network (934)	1850
<i>Kellie Schneider, Edward Pohl, Chase Rainwater, Jose Ramirez-Marquez</i>	
Cumulative Defensive Resource Allocation- Dynamic Programming Approach (1295)	1851
<i>Xiaojun Shan, Jun Zhuang</i>	
Socializing Disaster Preparedness (270)	1852
<i>Vicki M. Bier, Taher Jamshidi</i>	
A Framework for Detecting Hazardous Events Occurring in Transit with AutoID Technologies (1408)	1853
<i>Erick Jones, Vetrivel Gnaneswaran, Wei Chen, Mingzhen Yao</i>	
Decision Aiding for Protection of Soft Target Areas Using Digital Face Recognition (508)	1859
<i>Phani Kidambi, Ramya Ramachandran Janaki, S. Narayanan</i>	
Using Pre-deployment Information to Improve Connectivity in Mobile Ad Hoc Networks (1223)	1860
<i>Jarrett Chapman, Alice Smith, Jeffrey Smith</i>	
Statistical Monitors of North American Border-crossing Activity (1260)	1861
<i>Ryan Black, Justin Chimka</i>	
A Multiple-Objective Evolutionary Approach for Border Patrolling (1373)	1862
<i>Oswaldo Aguirre, Heidi Taboada</i>	
On Coxian Phased Distributions to Approximate the Border Crossing POE (1226)	1872
<i>Hiram Moya, Guy L. Curry, Don Phillips, Richard M. Feldman</i>	
Developing a Graphical User Interface for Maritime Security Decision Making (687)	1873
<i>Eric King, Carrie Ann Phillips, Xiuli Qu, Lauren Davis</i>	
Teen Drivers' Hazard Perception - Are We Using Crash-Representative Scenarios? (252)	1874
<i>Lenore Page, Laura Stanley, Jyoti Sharma</i>	
A Visual Analytical Cognitive Model for Supporting Geospatial Intelligence Analysts (793)	1884
<i>Giyeon Park, Celestine Ntuen</i>	
Seeking Correspondence in Judgment of Uncertain, Dynamic, and Complex Environment (1053)	1889
<i>Younho Seong, Younho Seong</i>	
The Effects of System Reliability and Uncertainty on Unmanned Aerial Vehicle Operator Performance under High Time Pressure (52)	1890
<i>Manuela Jaramillo, Dahai Liu, Shawn Doherty, Julian Archer, Yan Tang</i>	
Framework For Human Total Ownership Cost Based On Human Performance Cost Components (UHPCC) (954)	1900
<i>Tareq Ahram, Waldemar Karwowski</i>	
Integrating Human Factors Elements Into the System Performance Optimization Models (758)	1901
<i>Ahmad Sobhani, Mohamed Wahab Mohamed Ismail, Patrick Neumann</i>	
Association between Psychosocial Factors and Fatigue Using Data Mining (630)	1902
<i>Shaghayegh Parhizi, Linsey Steege, Kalyan Pasupathy</i>	
Investigating Vertical Displacement Within the Aesthesiometric Threshold of the Thigh (833)	1903
<i>Tycho Fredericks, Steven Butt, Diana Prieto, James Burns, Kyle Naumann, Kimberly Harms, Danielle Larson-Jaramillo</i>	
Physical Risk Factors for Neck Pain Among Oculoplastic Surgeons (1283)	1909
<i>Ashish Nimbarde, Majed Zreiqat, Jennifer Sivak-Callcott, Marsha Chapman</i>	
Conflict Detection Alerting Modes on Aircraft Separation Performance (577)	1915
<i>Hanniebey Wiyor, Celestine Ntuen, Younho Seong</i>	
A Multimodal-Augmented Reality Design Space for Effective Human-Machine Interface Design (540)	1922
<i>Joseph Akyeampong, Silvanus Udoka</i>	
Good Interface Design Increases Situation Awareness in Control Room Operators (1420)	1932
<i>Cristina Handal, Laura Hughes Ikuma</i>	

Intraoperative Handoffs and Non-Routine Events (NREs) during Cardiac Surgery (1073)	1941
<i>Renaldo Blocker, Douglas Wiegmann</i>	
Adverse Events Caused by Medication Management in the Geriatric Population (502)	1942
<i>Katherine Law, Jacqueline Morsberger, A. Joy Rivera-Rodriguez</i>	
Obesity-related Differences in Muscular Capacity During Sustained Isometric Exertions (335)	1949
<i>Lora Cavuoto, Maury Nussbaum</i>	
Obesity in The Workplace: Development of A Conceptual Framework (552)	1950
<i>Shaghayegh Parhizi, Kalyan Pasupathy, Linsey Steege</i>	
Computational Approach to De-biasing with Cognitive Feedback (460)	1959
<i>Younho Seong</i>	
Effects of Visual Interruptions on Task Times and Accuracies (1028)	1960
<i>Muhammet Gulum, Susan Murray</i>	
Wearing Respirators Effect on Fine Motor, Visual and Cognitive Skills (315)	1969
<i>Anas Alghamri, Susan Murray</i>	
The Effects of Metacognition in a Team-Based Dynamic Learning Environment (901)	1970
<i>Jung Hyup Kim</i>	
Is Teamwork Really that Beneficial in Healthcare? (303)	1971
<i>Jacey Gombert, Michelle Jahn, A. Joy Rivera-Rodriguez</i>	
Airport Surface Management as a Distributed Work System (312)	1978
<i>Philip Smith, Alicia Fernandes, Amy Spencer</i>	
Muscle Oxygen Saturation During Eight-hour Exposure to Repetitive Work (1130)	1979
<i>Rammohan Maikala, Vincent Ciriello, Niall O'Brien, Jacob Banks, Amanda Rivard</i>	
Neural Basis of Anticipatory Postural Balance (38)	1980
<i>David Rodrick, Andrei Ionescu, Vaishali Jayaprakash</i>	
Cardiovascular Reactivity to Concurrent Physical and Mental Workload (1167)	1981
<i>Ranjana Mehta, Michael Agnew</i>	
Participatory Design to Enhance Slate Device Accessibility (1072)	1982
<i>Gurjot Dhillon, Tonya Smith-Jackson, Francis Quek, Yasmine Elglaly</i>	
Effect of User's Mood on Technology Acceptance of High-Fidelity and Low-Fidelity Prototypes (1282)	1983
<i>Gurjot Dhillon, Tonya Smith-Jackson, Beant Kaur Dhillon</i>	
User-Centered Design Modeling Tool for Conceptual Design (704)	1993
<i>Angel Millan, Christopher Geiger</i>	
Performance of an Inertial Motion Capture System in Estimating Kinetics (625)	2003
<i>Sunwook Kim, Maury Nussbaum</i>	
Trunk Muscle Activation Pattern During Asymmetric Bending (682)	2004
<i>Xiaopeng Ning</i>	
Personal Factors and Low Back Pain Severity in Workers (998)	2005
<i>Nirathi Keerthi Govindu, Kari Babski-Reeves</i>	
Quantifying Differences in Shoulder Muscle Exertions during Simulated Carpentry Tasks (996)	2011
<i>Nirathi Keerthi Govindu, Kari Babski-Reeves</i>	
Biomechanical Loading of Shoulder Joints During Dynamic Cart Pushing Tasks. (1021)	2019
<i>Yun Sun, Ashish Nimbarte, Majid Jaridi, Hongwei Hsiao</i>	
Perceived Work and Duration of Keyboard and Mouse Use (1204)	2028
<i>Anna Kamphaus, Tycho Fredericks, Steven Butt</i>	
Predicting Engineering Students' Performance in Math Class: Lens Model Perspective (482)	2029
<i>Younho Seong, Ayman Alfaleh, Emma Codjoe, Policarpo Demattos, Bankole Fasanya, Sameer Tabbakh</i>	
Identification of Factors That Affect Pilot Decision Making with Their Respective Measurement Tools (104)	2030
<i>Maria Natalia Russi-Vigoya, Patrick E. Patterson</i>	
Toward a Unifying Theory of Trust - Framework for Trust and Its Calibration (828)	2031
<i>Younho Seong</i>	
The Impact of the Model Blended Learning in the ITTLA (360)	2032
<i>Jose Antonio Navarrete Prieto, Hilda Díaz Rincón, Ma. Guadalupe López Molina, Bernardo Reyes Guerra, Gabriel Vargas Salcedo</i>	
Enhancing a Linear Programming Course using a Problem-Based Learning Approach (927)	2042
<i>Cesia Lorena De La Garza, Heriberto Garcia-Reyes</i>	
Allocation of University Housing Residents in a Mexican Institution (694)	2043
<i>Juan Rojas-Villegas, Erika Paredes</i>	
ABET Accreditation: Is It Worth It? (347)	2044
<i>Ana Lidia Franzoni, Alejandro Teran, Marcelo Mejia</i>	
Integrating Problem-Based Learning and the Crosby's Maturity Grid in a Simulation Course. (862)	2045
<i>Heriberto Garcia-Reyes, Cesia Lorena De La Garza</i>	
Internationalization of Industrial Engineering Graduate Programs through Dual Degrees between Countries (1058)	2046
<i>Martha Alejandra Cabanas Villa, Pablo Nuño de la Parra</i>	
Factors Impacting Technology Transfer: The Maquiladora Industry in Yucatan, Mexico (623)	2053
<i>Ana Canto, Pilar Pazos, Carlos Blanco</i>	
Conjectural Variations Equilibrium in a Mixed Oligopoly with Non-Differentiable Demand Functions (803)	2062
<i>Vyacheslav Kalashnikov, Nataliya Kalashnykova, Mario A. Ovando Montantes</i>	
Review of Tools for Capability Analysis for Non Normal Process Behavior (491)	2063
<i>María Isabel Salazar-Alvarez, Carmen Temblador</i>	

Optimization of the Tensile Strength of Wood-Plastic Composites by Using Face Centered Central Composite Design (40)	2069
<i>Javier Cruz Salgado, Sergio Alonso, Roberto Zitzumbo</i>	
Allocation-packing of Customized Food Pantries in a Food Bank (478)	2079
<i>Jonathan Cuevas-Ortuño, Alejandra Gomez-Padilla</i>	
A Strategic and Standardized Simulation Model for Distribution Networks. (761)	2080
<i>Homero Contreras, Pablo Nuño, Eric Porras, Eduardo Zelaya</i>	
Solving Bilevel Toll Optimization Problems Making Use Of Sensitivity Analysis (940)	2089
<i>Vyacheslav Kalashnikov, Nataliya Kalashnykova, Roberto Hererra Maldonado</i>	
Proposal for a Rules Extraction Algorithm Through Genetic Algorithms (1032)	2090
<i>Maria Teresinha Arns Steiner, Anderson Roges Teixeira Góes, Pedro José Steiner Neto</i>	
Preferential System Attention in a Theme Park. (1352)	2099
<i>Lindsay Alvarez, Gonzalo Mejía</i>	
A Detailed DLMAIE Roadmap for Transactional Lean Six Sigma Projects (853)	2109
<i>Sonia Rebeca Rodriguez-Rascon, Jose Guillermo Ramirez-Galindo, Rodrigo Peimbert-Garcia, Alberto Hernandez-Luna, Carmen Temblador-Perez</i>	
IE Tools for Obtaining Products for the Base of Pyramid (689)	2119
<i>Juan Rojas-Villegas</i>	
Diagnosing Tool for Level of Maturity of Organizational Innovation Capabilities (921)	2120
<i>Graciela Caffarel, Imelda De Jesus Loera-Hernandez, Edgar Tienda Delgado, Myrna Flores Pineda</i>	
Determination of Parameters for Inventory Control of Spare Parts. (1018)	2129
<i>Diana Sánchez-Partida, Elías Olivares-Benitez, José Luis Martínez-Flores</i>	
Healthcare Supply Chain Practices in a Developing Country (608)	2137
<i>Angelica Burbano</i>	
One Product Supplier-buyer Supply Chain with Budget Constraints: A Game Theoretical Approach (1280)	2138
<i>Jose Fidel Torres Delgado</i>	
Strengths and Weaknesses of SCOR Model: Supply Chain Biodiesel Castor. (317)	2139
<i>Fernando Salazar, Judith Cavazos, Pablo Nuño</i>	
Beneficios de Contar con un Posgrado de Calidad en Áreas de Ingeniería Industrial Adscrito por CONACYT en una Universidad Privada en México (1056)	2149
<i>Ana Laura Vazquez Rivero, Pablo Nuño, Gustavo Alberto Ramírez Revilla</i>	
Freight Pricing Using Hedonic Price Functions With Nonparametric Regression (613)	2150
<i>Ashok Deb, Fei Hoai Lee</i>	
Robust Design in Ballistic Armor Applications: Estimation under Asymmetric Conditions (628)	2151
<i>Gregory Boylan, Byung Rae Cho</i>	
Multiobjective Shortest Paths for Military Transportation (1214)	2161
<i>Jeremy Jordan, Jeff Weir, Doral Sandlin</i>	
Quantitative Modeling for Military Operational Efficiency, Effectiveness, and Productivity Analysis (151)	2170
<i>Adedeji Badiru</i>	
The 'Bombing Problem' - Alternative Techniques in Modeling and Optimization (363)	2180
<i>Paul Goethals, Byung Rae Cho</i>	
Design of a Multifunction Aircraft Skin via Entropy Generation Minimization (570)	2181
<i>Kris Ahlers</i>	
Perception of Presence in a Mixed-Reality Training Environment (756)	2182
<i>Stephen Gilbert, Jason Pontius, Norene Kelly, Julio De La Cruz, Hector Gonzalez</i>	
Analyzing Military Strategies via a Stochastic Wargame (768)	2191
<i>James Chrissis, Jordan Lee, Michael Garrambone</i>	
Heuristics, Optimization, and Equilibrium Analysis for Automated Wargames (1327)	2201
<i>Wei-Yuan Hsu, Elizabeth Newell, Jun Zhuang, David Ross</i>	
Approximate Dynamic Programming for Dynamic Capacity Allocation with Multiple Priorities (1428)	2211
<i>Huseyin Topaloglu</i>	
Skart: A Skewness- and Autoregression-Adjusted Batch-Means Procedure for Simulation Analysis (1429)	2212
<i>Ali Tafazzoli, James Wilson</i>	
Risk Analysis of Commitment-Option Contracts with Forecast Updates (1430)	2213
<i>John Buzacott, Houmin Yan, Hanqin Zhang</i>	
An Age- and State-Dependent Markov Model for Degradation Processes (1427)	2214
<i>Massimiliano Giorgio</i>	
Characterization of Nonlinear Profiles Variations using Mixed-Effect Models and Wavelets (1431)	2215
<i>Kamran Paynabar, Judy Jin</i>	
Lean Transformation at Alegent Health (1451)	2216
<i>Melissa Maday, Tonya Kogel</i>	
The Lean Journey at MD Anderson's Labs (1452)	2217
<i>Ron Phipps</i>	
A Lean Transformation in Material Handling (1449)	2218
<i>Chris Nelson</i>	
Manufacturing Warehouse Conversion to a Lean Pull System (1450)	2219
<i>Mark Nash</i>	
Lean Division Town Hall Meeting (1458)	2220
<i>Md Sarder</i>	

Lean Implementation Tactics Learned from Two Contrasting Manufacturing Cases (240)	2221
<i>Hung-Da Wan</i>	
An Economic Framework for Total Productive Maintenance (TPM) (978)	2222
<i>Rodrigo Peimbert-Garcia, Jorge Limon-Robles, Mario Beruvides, Diana García-Hernández</i>	
Analogy of Theory X Y Z Characteristics and Lean Six Sigma Success (1139)	2232
<i>Janet Sanders</i>	
The Human Side of Lean Manufacturing: A Successful Model Implementation (1249)	2233
<i>Elba Pilar Tress, Agustin Buendia Espinoza</i>	
Enhancing the Service Efficiency of Non-profit Organizations through Lean Thinking and VSM Analysis: A Case Study of Assistive Device Resource Centers (1442)	2243
<i>Pu-Yuan Chang, Cheng Cheng-Yang, Li-Kai Chan</i>	
A Queuing Theory Approach to Compare Job Shop and Lean Work Cell Considering Transportations (1443)	2244
<i>Mohammad Moshref-Javadi</i>	
A Lean Approach to Improving the ARC Computer Labs (1444)	2245
<i>Ibaad Sadiq, Prateek Patel</i>	
Improving Intermodal Operations through Freight Flow Analysis (133)	2246
<i>Md Sarder, Tulio Sulbaran, Chad Miller</i>	
Implementing Lean Manufacturing in the Sewing Industry (724)	2256
<i>Mohammed Obeidat, Z. J. Pei, Raid Al-Aomar</i>	
Improvements In Shipboard Fiber Optic Installation Using Lean Tools (1372)	2266
<i>Md Sarder, Libby Desselles</i>	
Influence of 5s Implementation in Safety and Health in Construction (841)	2267
<i>Juan Ignacio Prieto Lopez, Faustino Patiño Cambeiro, Michelle Brodeschi</i>	
Cost Reduction in Healthcare via Lean Six Sigma (490)	2268
<i>Yu Huang, Xueping Li, Joseph Wilck, Thomas Berg</i>	
Applying Toyota Production System Principles and Tools at the Ghent University Hospital (880)	2276
<i>Dirk Van Goubergen, Jo Lambert</i>	
U-line Design and Operation with Helper Tasks (227)	2283
<i>John Shewchuk</i>	
Lean Multi-generational Product Development (1046)	2293
<i>Satish Tyagi, Kai Yang, Xianming Cai</i>	
Towards Failure Free Lean Manufacturing Implementation: Lean RED (459)	2294
<i>Katie Grantham, Christina Jung</i>	
A Proposed Model for Lean Assessment using Employee Perception (144)	2295
<i>Paul Componation, Sushil Shetty, Sampson Gholston</i>	
Developing Direct Relationships and Effects of Waste Reduction/Elimination and Operating Performance Measures (1213)	2296
<i>Joseph Ogundu, Ahad Ali</i>	
Integrating Lean, Six Sigma and Logistics Supports in a Supply Chain Model (1277)	2297
<i>Mohammad Rahman, Asheka Rahman</i>	
Newly Developed Handling and Cutting System of Green Cake in AAC Manufacturing (67)	2304
<i>Saud Alfarhan</i>	
A Process-Based Method for Sustainable Manufacturing Assessment (1245)	2305
<i>Walter Clow, Karl Haapala, Matthew Carter, Elizabeth Lenger, Jason Marr</i>	
Pathways Towards Sustainable Manufacturing Enterprises (15)	2306
<i>Ibrahim Garbie</i>	
A Process Engineering Perspective of Scaffold Fabrication Methods in Regenerative Medicine: A Review (1090)	2316
<i>Golbarg Kazemi Tutunchi, Chuang Wei, Rohan Shirwaiker, Jingyan Dong</i>	
Multi-Material Fabrication of Tissue Engineering Scaffold (685)	2326
<i>Chuang Wei, Jingyan Dong</i>	
Designing Bio-mimetic Variational Porosity for Tissue Scaffolds (708)	2327
<i>Akm Khoda, Bahattin Koc</i>	
Modeling of Multifunctional Deformable Porous Scaffolds for Soft Tissue Engineering (707)	2337
<i>Akm Khoda, Bahattin Koc</i>	
Bio-Manufacturing and Soft Tissue Expansion Process by Mechanically Induced Stress (1100)	2346
<i>Yuan-Shin Lee</i>	
Applying Industrial Engineering to Regenerative Medicine Research (1083)	2347
<i>Molly Purser, Sean Carr</i>	
Multi-functional Hybrid Tissue Scaffolds (206)	2357
<i>Yahui Zhang, Omer Elgaali, Ibrahim Tarik Ozbolat</i>	
A Novel Flow-Diverting Thin Film Nitinol (TFN) Covered Microstent (89)	2363
<i>Youngjae Chun, Daniel Levi, K. P. Mohanchandra, Colin P. Kealey, Haithem Babiker, David H. Frakes, Soojung C. Hur, Hsin-Yun Chang, Michael C. Emmons, Po-Yu Lin, Allan W. Tulloch, David A. Rigberg, Dino Di Carlo, Fernando Vinuela Jr, Fernando Vinuela, Gregory P. Carman</i>	
An Analysis of the Relationship of Medical Device Complexity and FDA (1027)	2364
<i>Josue Crespo-Varela, Lourdes A. Medina, Gul Okudan Kremer</i>	
Controlling Corrosion Mechanism of Biodegradable Magnesium Alloys for Implant Applications (601)	2374
<i>Jessica Perkins, Salil Desai, Zhigang Xu, Christopher Smith</i>	
Characterization of the Antibacterial Efficacy of Electrically Stimulated Silver Ions (815)	2383
<i>Rohan Shirwaiker, Richard Wysk, Robert Voigt, Harriet Nembhard, Paul Cohen</i>	

A Novel Fabrication Method for Embedding Micro scale Metal Structures into Polymers for Flexible Electronic (1163)	2384
<i>Hector Carrion, Rohan Shirwaiker, Sanjay Joshi, Stephen Fonash</i>	
Laser Based Microdroplet Evaporation Towards Scalable Micro and Nano Manufacturing (605)	2394
<i>Taye Esho, Salil Desai</i>	
High-Rate Tunable Nanomachining with an Atomic Force Microscope (683)	2402
<i>Li Zhang, Jingyan Dong</i>	
Development of a Patient Specific Limb Sparing Implant for the Treatment of Canine Osteosarcoma (1229)	2403
<i>Timothy Horn, Ola Harrysson, Denis Marcellin-Little</i>	
Developing Biosensors and Bioactuators by Rapid Prototyping of Microstructure with Magnetotactic Bacteria (1104)	2404
<i>Yuan-Shin Lee</i>	
Load-monitoring Systems in Biomedical Implants: a Comprehensive Review and Proposed Future Directions (257)	2405
<i>Guha Prasanna Manogharan, Richard Wysk</i>	
Failures in Medical Device Development: An FDA Perspective (994)	2406
<i>Lourdes A. Medina, Guha Prasanna Manogharan, Richard Wysk, Gul E. Okudan Kremer</i>	
A Review of Emerging Industrial and Systems Engineering Trends and Future Directions in Biomanufacturing (817)	2407
<i>Zhuo Tan, Rohan Shirwaiker</i>	
Design and Simulation of Coronary Stents (942)	2415
<i>Anweshana Vaizatasatya, Emmanuel Baisie, Zhigang Xu, Zhichao Li</i>	
Effect of Cryomilling Time on Resultant Properties of Cartilage Scaffolds (1049)	2421
<i>John Benhur Jonnalagadda Timothy, Iris Rivero</i>	
Design Optimization of Grit Arrangement for Diamond Disc Pad Conditioners (1123)	2422
<i>Emmanuel Baisie, Zhichao Li, Xiaohong Zhang</i>	
Analysis To Improve A Flexible Work Cell Through Robotics (1272)	2430
<i>Christopher Greene, Erich Roeszies, Tandeep Singh Jandu</i>	
Avoiding Surface Voids in Measuring External Profiles of Porous Objects (693)	2440
<i>Ye Li, Naveen Surisetti, Joseph Chen</i>	
A Framework for Mechanical Design Optimization Using Bio-Inspired Numerical Simulation (519)	2441
<i>Narasimha Nagaiah, Christopher Geiger</i>	
Generation of Intermediate Manufacturing Solid Models for Alternative Feature Representations (1236)	2442
<i>Jaikumara Arumugam, Dusan Sormaz</i>	
Harnessing Complexity: Evaluating Product Family Design (137)	2443
<i>Nihal Orfi, Asli Sahin, Janis Terpeny</i>	
A Model to Assess the Successful Implementation of Cellular Manufacturing: An AHP Approach (848)	2444
<i>Damaliz Torres, Paola Santiago, Viviana Cesani</i>	
E-Quality Control in Solar Panel Inspection Using Image-based Stereo Reconstruction (1276)	2445
<i>Tzu-Liang Tseng, Jun Zheng, Juan Venegas Mendez, Paras Mandal, Karthik Varma Koppella, Chun-Che Huang, Richard Chiou, Carlos Garcia</i>	
A Methodology to Assess Operational Complexity Characteristics (1092)	2455
<i>Jill Urbanic, George Bacioiu</i>	
Multiobjective Mechanical Design Optimization for Gas Turbine Blades (520)	2465
<i>Narasimha Nagaiah, Christopher Geiger</i>	
A Novel Micro Manufacturing Process for Medical Thin Film Nitinol (90)	2466
<i>Youngjae Chun, Daniel Levi, K. P. Mohanchandra, Michael C. Fishbein, Gregory P. Carman</i>	
Finite Element Analysis on Single Grit Cutting in Micro Grinding (1074)	2467
<i>Brahmanandam Gangineni, Xinyu Liu, Weihang Zhu, Victor Zaloom</i>	
Silver Nanowires for Transparent Electrodes (1424)	2477
<i>Paul Leu</i>	
Modified Value Stream Mapping for Six Sigma Measurement Phase (602)	2478
<i>Paola Claros Ortuño, Carmen Temblador Perex</i>	
A Review of Transactional Lean Six Sigma (603)	2485
<i>Zamira Del Valle Barbosa, Carmen Temblador</i>	
A Role of Reconfiguring Manufacturing Enterprise as a Major Requirement for Sustainability (27)	2495
<i>Ibrahim Garbie, Hamid Parsaei</i>	
Quality Analysis in Serial Production Line with Repairs: A Markov Chain Approach (306)	2505
<i>Feng Ju, Jingshan Li, Ningjian Huang, Guoxian Xiao, Stephan Biller</i>	
Vibration Control in Bar Feeders Using Magnetorheological Fluids (798)	2513
<i>Harry Pierson, Kevin Hubbard, Jerald Brevick</i>	
Fused Deposition Modeling for Assembly: Issues of Geometric Inaccuracy (407)	2523
<i>Adan Sanchez, Francisco Balandrano, Hung-Da Wan</i>	
E-Quality Manufacturing of Bio-parts Using Rough Set Theory (1134)	2524
<i>Paola R. Bonham, Tzu-Liang Tseng</i>	
Confidence Intervals on Cost Estimates When Using a Feature-based Approach (926)	2533
<i>Bryon Iacianci, Dale Masei</i>	
Risk Based Worker Allocation: Single Task Per Station and Balanced Line (505)	2534
<i>Krishna Krishnan, Shokoufeh Mirzaei, S. Hossein Cheraghi, Sathya Madhan Solaimuthu Pachaimuthu</i>	

Analysis of a New Signal for Bottleneck Detection using Descriptive Statistics based on Inter-Departure Time Data (473)	2544
<i>Tommy White, Sankar Sengupta, Robert Van Til</i>	
Analysis of a New Signal for Bottleneck Detection using Higher Order Statistics based on Inter-Departure time Data (471)	2545
<i>Tommy White, Sankar Sengupta, Robert Van Til</i>	
An integrated Productivity and Energy Consumption Model in Serial Production Lines. (310)	2546
<i>Xiaolei Xie, Jingshan Li</i>	
Transient Analysis of Serial Production Lines with Geometric Machines (912)	2553
<i>Guorong Chen, Chuanfeng Wang, Liang Zhang, Jorge Arinez, Stephan Biller</i>	
Dynamic Scheduling of a Flexible 'N' Queuing Network under CONWIP (216)	2554
<i>Fang Dong, Mark Van Oyen, David Singer</i>	
Approximate Linear Programming Relaxations for Commodity Storage Real Option Management (416)	2555
<i>Selvaprabu Nadarajah, Francois Margot, Nicola Secomandi</i>	
Approximate Dynamic Programming for Energy Storage Problems (212)	2556
<i>Warren Scott</i>	
Aggregation-Based Learning in Approximate Dynamic Programming (217)	2557
<i>Ilya Ryzhov</i>	
A Large Scale Simulation Model for Design of Non-pharmaceutical Intervention Strategies to Mitigate Pandemic Influenza Outbreaks (193)	2558
<i>Dayna Martinez, Tapas Das</i>	
A Simulation-Based Evaluation of Layouts Employing PEM Forklifts (194)	2559
<i>Abhijit Gosavi, Scott Grasman, Suzanna Long, Sean Schmidt</i>	
Assessing Newsvendor Policies to Commit Energy for Hybrid Renewable Systems (313)	2560
<i>Fermin Mallor, Scott Grasman</i>	
Effects of Reliability and Time Pressure on Unmanned Aircraft Systems Operator Performance (24)	2561
<i>Rania Ghatas, Dahai Liu, Christina Frederick-Recascino, John Wise, Dennis Vincenzi, Julian Archer</i>	
Analysis of Airport Security Screening Checkpoints using Discrete Event Simulation (25)	2571
<i>Stephen Dorton, Dahai Liu</i>	
Assessment of Situation Awareness Contribution to Aircraft Separation Performance (578)	2581
<i>Hannibey Wiyor, Celestine Ntuen, Younho Seong, Xinyu Zhang</i>	
Development and Flight Test of a Real-Time Energy Management Display (914)	2588
<i>Isaac Atuahene, Rupy Sawhney, Charles Aikens</i>	
Effective Discharge Planning and Decision for Care Transition Improvement (86)	2589
<i>Lingling Sheng, Jianfeng Mao, Khim Teck Yeo, Ian Leong</i>	
Analysis of Uncertainty due to Calibration in Clinical Laboratory Measurement Processes (730)	2599
<i>Varun Ramamohan, Jim Abbott, George Klee, Yuehwern Yih</i>	
Discrete Event Simulation Analysis to Compare Emergency Severity Index and FAHP-MAUT Triage Algorithms (807)	2609
<i>Omar Ashour, Gul E. Okudan Kremer, Deborah Medeiros</i>	
Enhancing Performance of the Loading Process in a Cement Factory Through Simulation (150)	2617
<i>Tarek Al-Hawari, Abdulaziz Ahmed, Laila Salman</i>	
Simulation Modeling and Analysis of Regenerative Medicine Production Systems (7)	2625
<i>Sean Carr, Stephen Roberts</i>	

VOLUME 4

Efficient Performance Evaluation of a Perturbed Job Shop Using Max-Plus Algebra (267)	2626
<i>Manjeet Singh, Robert Judd</i>	
A Neural Network Approach for Bid Prediction in Electronics Manufacturing (1087)	2636
<i>Kate O'Connor, Sarah Lam, Ross Havens, Antonio Depaolo</i>	
Simulation-based Optimization of Solid Waste Management and Recycling Programs (268)	2643
<i>Eric Antmann, Nurcin Celik, Xiaoran Shi, Yading Dai</i>	
A Simulation-Based Approach for a Solar Panel Production System (883)	2653
<i>Leonardo Bedoya-Valencia, Ange Lionel Toba</i>	
Augmenting Regression with Direct Stochastic Gradient Estimates (245)	2661
<i>Michael Fu, Huashuai Qu</i>	
Computing Budget Allocation in Policy Improvement for Building Energy Management (247)	2662
<i>Jian-Xiang Shen, Qing-Shan Jia</i>	
Using Simulation for Analyzing Optimal Organ Allocation for Liver Transplant (251)	2672
<i>Naoru Koizumi, Chun-Hung Chen, Rajesh Ganesan</i>	
Expansion of the Panama Canal: Simulation Modeling and Artificial Intelligence (1228)	2673
<i>Luis Rabelo, Luz Andrade, Petros Xanthopoulos, Mario Marin</i>	
A Risk Neutral Simulation Framework for Counterparty Credit Risk (1368)	2683
<i>Changjian Huang, Li Zhang</i>	
A Clustering-based Approximation Method for Capacitated Inspection of Traffic Light Networks (592)	2684
<i>Rana Afzali-Baghdadabadi, Esra Sisikoglu, Mustafa Sir</i>	
Agent-based Modeling of Human Performance Assessment (673)	2685
<i>Hong Jiang, Waldemar Karwowski, Tareq Ahram</i>	

Sensitivity Analysis of Tutor Staffing Schedule using Discrete Event Simulation (51)	2686
<i>Tara Allen, Dahai Liu, Julian Archer</i>	
Validation Methods for Conceptual Modeling: A Study on Medical Devices (990)	2696
<i>Lourdes A. Medina, Richard Wysk, Gul E. Okudan Kremer</i>	
Modeling Human Interactions with Learning under the Extended Belief-Desire-Intention Framework (1012)	2706
<i>Sojung Kim, Hui Xi, Santosh Mungle, Young-Jun Son</i>	
Disease Dynamics in Three Models of Dengue Fever (1289)	2716
<i>Kun Hu, Christian Thoens, Stefan Edlund, Matthew Davis, James Kaufman</i>	
A Concise Discrete-Event Simulation Methodology for Internal Supply Chain Decision-Making (604)	2726
<i>Isidro M. Cristobal-Vazquez, Ma. Del Rosario Perez-Salazar, Mario Aguilar Fernandez</i>	
Simulating a Physical Internet Enabled Logistics Web:The Case of Mass Distribution in France (755)	2727
<i>Driss Hakimi, Benoit Montreuil, Rochdi Sarraj, Eric Ballot</i>	
Modeling Time-Dependent Patient Arrivals in Hospital Simulation Models (638)	2728
<i>Christopher Stromblad, Priyantha Devapriya</i>	
Simulation Model of the Supply Chain of SMEs of Graphic Arts in Bogotá D.C. (637)	2735
<i>Leidy Soraída Vellozo Patiño</i>	
Simulating the Performance of Various Revenue Management Engines (1257)	2736
<i>Amanda Fischer, Esma Gel, Timothy Jacobs, Hadi Purnomo, Michael Clough</i>	
The Augmented Reality to Promote Continuous Improvement of VDC (1005)	2737
<i>Michelle Brodeschi, Juan Ignacio Prieto Lopez, Faustino Patiño Cambeiro, Faustino Patiño Barbeito</i>	
Nested Logit Model for Airport Pedestrian Activity-Travel Patterns Identification (908)	2738
<i>Xuan Liu, John Usher</i>	
Simulation of Indoor Pedestrian Traffic (922)	2748
<i>John Usher, Ross McCool, Lesley Strawderman</i>	
A Model Based Enterprise Approach in Electronics Manufacturing: Predictive Environment for Visualization of Electromechanical Virtual Validation (69)	2758
<i>Ibrahim Tarik Ozbolat, Amer Debabneh, Omer Elgaali, Yahui Zhang, Robert Timothy Marler, Steven Turek</i>	
Where Does a Metamodel Fit Best? (413)	2763
<i>Gregory Van Amerongen, Mauricio Cabrera-Ríos</i>	
Understanding Identification Standards Adoption Using a SD modeling approach (610)	2764
<i>Angelica Burbano, Ronald Rardin, Edward Pohl</i>	
A Periodic Blood Inventory Model with Crossmatched Blood and Two Demand Classes (445)	2765
<i>Kanchala Sudtachat, Maria Mayorga</i>	
A POMDP-Based Approach for Determining the Implied Costs of a Breast Cancer Screening Policy (446)	2775
<i>Kuang-Hao Buch, Julie Simmons Ivy, James Wilson</i>	
Policies for Accommodating Elective and Non-Elective Surgeries (1287)	2776
<i>Narges Hosseini, Kevin Taaffe, Maria Mayorga</i>	
Static-Dynamic Uncertainty Strategy for a Stochastic Dynamic Lot-Sizing Problem (294)	2777
<i>Huseyin Tunc, Burak Eksioglu</i>	
Transportation Mode Selection under Carbon Emissions Considerations (892)	2778
<i>Gokce Palak, Sandra Eksioglu</i>	
Optimization Models to Design and Manage Environmentally Friendly Biofuel Supply Chains (411)	2779
<i>Mohammad Marufuzzaman, Sandra Eksioglu, Rafael Hernandez</i>	
A Hybrid Inventory Policy Responding to Surge Demand (296)	2789
<i>Mingzhou Jin, Md Roni, Alberto Garcia-Diaz</i>	
Behavioral Heterogeneity in Adherence and Optimal Breast Cancer Screening Policies (309)	2799
<i>Turgay Ayer</i>	
Optimizing Patient-to-bed Assignment Under Isolation Requirements (319)	2800
<i>Ruben Proano, Christina Cignarale, Michael Kuhl</i>	
Equilibrium Stability and Payoff Efficiency in the Timing of Prearranged Paired Kidney Exchanges (321)	2809
<i>Murat Kurt, Mark Roberts, Andrew Schaefer, Utku Unver</i>	
Joint Location-Dispatching Model for EMS Systems Considering Various Performance Measures (777)	2810
<i>Hector Toro Diaz, Maria Mayorga, Sunarin Chanta, Laura McLay</i>	
Emergency Medical Service Allocation in Response to Large Scale Events (1119)	2811
<i>Gabriel Zayas-Caban</i>	
Integrated Dispatching and Districting Policies for EMS Vehicles (609)	2812
<i>Damitha Bandara, Maria Mayorga</i>	
Experimental Designs with a Large Number of Variables (437)	2813
<i>Kasandra Ramirez, Mauricio Cabrera Ríos</i>	
Highway Winter Crash Modeling with Stochastic Covariates and Missing Data (513)	2814
<i>Akram Khaleghi, Farnoosh Naderkhani, Viliam Makis, Susan Nichol</i>	
A Point Process Model with Stochastic Intensity for Collision Forecasting (55)	2822
<i>Chen Lin, Michael Kim, Viliam Makis, Susan Nichol</i>	
Do Sabermetrics Suggest a Baseball Hall of Fame Revision? (830)	2830
<i>Thomas Brady</i>	
Improving Partnership Selection after Disasters: Game Theory and Resource Allocation (1284)	2834
<i>John Coles, Jun Zhuang</i>	
Consistent Conjectures Are Optimal Nash Strategies in a Second-level Game (1345)	2835
<i>Nataliya Kalashnykova, Vladimir Bulavsky, Vyacheslav Kalashnikov, Roberto Hererra Maldonado, Mario A. Ovando Montantes</i>	

Simulating Optimized Social Actions with Bounded-Rationality in a Cooperative Game Environment (403)	2836
<i>Moeed Haghnevis, Ronald Askin</i>	
Partnership Optimization Decision Support System: Improving Partnerships in Disaster Relief (1286)	2837
<i>John Coles, Jun Zhuang</i>	
A Global Optimization Algorithm for Multi-shift Vehicle Routing Problems (640)	2838
<i>Shabnam Zangeneh-Khamooshi, Zelda Zabinsky, Joseph Heim</i>	
Exact and Approximate Methods for Capacitated Team Orienteering Problem (1020)	2848
<i>Behrooz Kamali, Leily Farrokhar</i>	
Analysis of Continuous and Discrete Time Models for the HVRPTW (832)	2849
<i>Ilknur Uludag, Chase Murray</i>	
Truckload Relay Network Design and Mixed Fleet Dispatching Optimization (1224)	2850
<i>Hector Vergara, Sarah Root</i>	
Supplier Selection and Lead Time Reduction (580)	2851
<i>Mingzhou Jin, Burak Eksioglu</i>	
Cash Flow Optimization in a Multi-Project Environment (581)	2852
<i>Hessamedin Vali, M. Bayram Yildirim, Esra Buyuktahtakin, Don Malzahn</i>	
Pricing and Service Demand Management (582)	2861
<i>Murat Erkoc</i>	
Disjunctive Conic Cuts for Second Order Cone Optimization (1045)	2862
<i>Tamas Terlaky, Julio Goetz, Pietro Belotti, Imre Pólik, Ted Ralphs</i>	
A Cutting-Plane Method for Two Facility Reliability Problems (305)	2863
<i>Mike Prince, Cole Smith</i>	
Heuristics for Cutting Stock Problem with Setup Cost (271)	2864
<i>Azadeh Mobasher, Ali Ekici</i>	
A Decomposition Algorithm for the Minimum Weighted Maximal Matching Problem (859)	2873
<i>Merve Bodur, Tinaz Ekim, Z. Caner Taskin</i>	
Verification of QFD & K-means based Product Family Size Optimization through ANP: The Viper Case (1019)	2874
<i>Cassandra Sotos, Gul Okudan Kremer, Gulsen Akman</i>	
Interpolation Approximations for Tandem Queues (12)	2884
<i>Kan Wu, Leon McGinnis</i>	
Adaptive Convex Enveloping for Multidimensional Stochastic Dynamic Programming (676)	2885
<i>Sheng Yu, Enrique Campos-Nanez</i>	
Cross-sector Patient Flow Model (1382)	2894
<i>Michael Carter, Ali Vahit Esensoy</i>	
An Energy Efficient Health-care Asset Replacement Model Including Multiple Asset Types (648)	2895
<i>Tate Lampe, Esra Buyuktahtakin</i>	
Incorporation of Delivery Times in Gamma Knife Perfexion Treatment Optimization (1383)	2902
<i>Dionne Aleman</i>	
Rapidly Detecting an Anomaly Spreading Stochastically on a Network (1203)	2903
<i>David Morton, Jinho Lee, John Hasenbein</i>	
Optimal Operating Strategies for Lifetime Maximization of Query-Based Wireless Sensor Networks (545)	2904
<i>Guvenc Degirmenci, Jeffrey Kharoufeh, Oleg A. Prokopyev</i>	
Inbound Transportation and Inventory Optimization to Supply Parts to High-Mix Assembly Lines (1201)	2905
<i>Erhan Kutanoglu</i>	
Solution Methodology of Two-Machine, One Buffer Problem With Multiple Failed States (643)	2906
<i>Alireza Fazlirad, Theodor Freiheit</i>	
Combining Game Theory and MDPs to Formulate Effective Search Policies (1062)	2916
<i>John Dulin, Ashlee Knapp</i>	
Control and Optimization of Bio-processes Using Markov Decision Process (1341)	2917
<i>Tugce Martagan, Ananth Krishnamurthy</i>	
Information Workflow Optimization: Theory and Heuristics (1399)	2925
<i>Michael Hirsch, Rakesh Nagi, Hector Ortiz-Pena, Adam Stotz, Moises Sudit</i>	
Robust Optimization Models for Volunteer Scheduling (649)	2926
<i>Christopher Garcia, Ghaith Rabadi</i>	
Global Retrieval Heuristic and Genetic Algorithm in Block Relocation Problem (547)	2932
<i>Mazen Hussein, Matthew Petering</i>	
Multiobjective Optimization and Six Sigma for Online Process Control and Decision-Making (824)	2942
<i>Emad Abualsaud, Christopher Geiger</i>	
Zigzag Search for Continuous Multi-objective Optimization (1233)	2950
<i>Honggang Wang</i>	
Randomly Generating Weight Vectors in a Bounded Region for the Sensitivity Analysis (627)	2951
<i>Alex Gutman, Jeff Weir</i>	
Optimal Clearance Time and Path Generation for Large Evacuation Networks (974)	2961
<i>Gino Lim, Mukesh Rungta, M. Reza Baharnemati</i>	
Impact of Decentralized Decision-making on Access to Public Health Facilities (344)	2971
<i>Brian Moore, Jessica Heier Stamm</i>	
Dynamic Facility Location and Relocation Problem in Disaster Response (976)	2981
<i>Ayşe Durukan Sonmez</i>	
On Solving the Problem of Manufacturing Cell Formation Using Decision Factors in a Genetic Algorithm (208)	2982
<i>Mariana Contreras-Mendez, Mario Aguilar Fernandez, Isidro M. Cristobal-Vazquez</i>	

Adaptive Metaheuristics with Schooling Genetic Algorithms (949)	2991
<i>Patrick Wanko, Paul Stanfield</i>	
A Metaheuristic Approach to Supply Chain Network Design Using CVaR (1112)	2998
<i>Alireza Madadi, Mary Beth Kurz, Scott Mason, Kevin Taaffe</i>	
Modeling Warehouse Coordination in Response to Predictable Disasters (72)	3007
<i>Lauren Davis, Daniel Mota</i>	
Unreliable Supplier Selection with Fixed Costs and Order Constraints (79)	3008
<i>Russell E. King, Yingying Wang, Semra Sebnem Ahiska, Don Warsing, Ana Vila-Parrish</i>	
Multi-Period Price Promotions in a Single-Supplier, Multi-Retailer Supply Chain under Asymmetric Demand Information (73)	3018
<i>Yiqiang Su, Joseph Geunes</i>	
Joint Spare Parts Inventory and Reliability Decisions under a Service Constraint (856)	3019
<i>Semra Agrali, Baris Selcuk</i>	
Rating Customers According to Their Promptness to Adopt New Products (980)	3020
<i>Dorit Hochbaum, Erick Moreno-Centeno, Phillip Yelland, Rodolfo Catena</i>	
The Impact of Multi-Core Computing on Computational Optimization (916)	3021
<i>Timothy Middelkoop</i>	
A Parallel Approach for Solving Network Interdiction Problems (371)	3031
<i>Dia St. John, Chase Rainwater, Cole Smith</i>	
Artificial Bee Colony Algorithm for Solving the Uncapacitated Single P-Hub Median Problem (1157)	3032
<i>Ornurai Sangsawang, Sunarin Chanta</i>	
A Hybrid Tabu Search for Locating and Dispatching Emergency Response Units Using an Imbedded Queuing Model (1149)	3040
<i>Sunarin Chanta, Maria Mayorga, Laura McLay</i>	
A Heuristic Approach for Designing Inland Waterways Emergency Response System (405)	3048
<i>Leily Farrokhvar, Heather Nachtmann</i>	
Component Reliability with Competing Failure Processes and Dependent Shock Damage (1363)	3049
<i>Sanling Song, David Coit, Qianmei Feng, Hao Peng</i>	
Using Genetic Algorithms to Solve Component Placement Problems in the Power Industry (1365)	3058
<i>Anuar Aguirre, Jose Francisco Espiritu Nolasco</i>	
Dynamic Routing in a High-threat Environment (1186)	3059
<i>Jihyun Jo, Mustafa Sir, Esra Sisikoglu</i>	
Stochastic Resource Allocation Models with Postponement Options (451)	3060
<i>Tianke Feng, Joseph Hartman</i>	
Dynamically Optimizing the Administration of Vaccines from Multi-Dose Vials (367)	3061
<i>Lisa Maillart, Bryan Norman, Jayant Rajgopal, Maryam Hasanzadeh</i>	
Modeling Infectious Disease and The Effect of Early Detection (368)	3062
<i>Emine Yaylali, Julie Simmons Ivy, Reha Uzsoy</i>	
Optimizing Treatment Initiation Decision Making for Patients with Alzheimer's Disease (1105)	3063
<i>Muge Capan, Julie Simmons Ivy</i>	
Heuristic Algorithms for the Aircraft Arrival and Departure Scheduling on Multiple Runways (475)	3073
<i>Ghaith Rabadi, Gulsah Hancerliogullari, Mohamed Kharbeche, Ameer Al-Salem</i>	
Multiple-Runway Aircraft Sequencing Problems using Mixed-Integer Programming (692)	3081
<i>Ameer Al-Salem, Farbod Farhadi, Mohamed Kharbeche, Ahmed Ghoniem</i>	
Systems Optimization Challenges within the U.S. Army Corps of Engineers' Navigation Program (1294)	3089
<i>Heather Nachtmann, Kenneth Mitchell</i>	
Operations Research a Tool for Decision Making (1309)	3097
<i>Ever Angel Fuentes Rojas</i>	
Regret Considerations When Optimizing Under Uncertainty (359)	3098
<i>Chin Hon Tan, Joseph Hartman</i>	
Computational Study of Chance Constrained Linear Program (876)	3099
<i>Feng Qiu, Shabbir Ahmed, Santanu Dey</i>	
Chance-constrained Two-stage Stochastic Program and Its Applications to Wind Energy Integration (1398)	3100
<i>Qianfan Wang, Yongpei Guan</i>	
Benders' Decomposition for the Two-Stage Security-constrained Robust Unit Commitment Problem (1217)	3101
<i>Ruiwei Jiang, Muhong Zhang, Guang Li, Yongpei Guan</i>	
A Branch-and-Cut Method for Dynamic Decision-Making under Joint Chance Constraints (204)	3111
<i>Minjiao Zhang, Saumya Goel, Simge Kucukyavuz</i>	
Solution Quality and Efficiency of a Sample Average Approximation based Optimization Algorithm for Policy Optimization with a Service Level Constraint (534)	3112
<i>Yasin Unlu, Manuel Rossetti</i>	
A Gomory Driven Decomposition Algorithm for 2-Stage Stochastic Integer Programs (250)	3113
<i>Dinakar Gade, Simge Kucukyavuz, Suvrajeet Sen</i>	
Optimal Decision Making in the Presence of Breast Cancer Regression (249)	3114
<i>Shengfan Zhang, Julie Simmons Ivy</i>	
Admission and Termination Control of a Two-Class Loss System (281)	3115
<i>Mehmet Yasin Ulukus, Refik Gullu, Lerzan Ormeci</i>	
Optimal Implantable Cardioverter Defibrillator (ICD) Generator Replacement (307)	3116
<i>Anahita Khojandi, Lisa Maillart, Oleg A. Prokopyev</i>	

Optimally Provisioning Spares and Repair Capacity for a Vital Deteriorating Component (308)	3117
<i>Murat Kurt, Jeffrey Kharoufeh, Lisa Maillart</i>	
Stochastic Programming and Scenario Tree Generation in Supply Chain Planning (1218)	3118
<i>Alex Gose, Brian Denton, Karl Kempf, Reha Uzsoy</i>	
Mean-Risk Stochastic Programming Approach to Chemotherapy Patient & Resource Scheduling (1142)	3119
<i>Tanisha Cotton, Michelle McGaha, Eduardo Perez, Lewis Ntamo</i>	
Robust and Stochastically Weighted Multi-Objective Optimization Models and Reformulations (1168)	3120
<i>Jian Hu, Sanjay Mehrotra</i>	
Simulation-Optimization Techniques for Distributed Generation Problems with Renewable Wind Technology (696)	3121
<i>Molly McDaniel, Clara Novoa, Tongdan Jin</i>	
Risk-Averse Multistage Stochastic Programming Approach to Disaster Management Problem (801)	3122
<i>Ebru Angun, Nihan Karaca</i>	
Designing a Dynamic Bi-Objective Network Model for a Petroleum Supply Chain (1316)	3123
<i>Amirhossein Khosrojerdi, Hadizadeh Hadizadeh, Janet K. Allen</i>	
Robust Military Asset Allocation Model (1234)	3134
<i>Andreas Thorsen, Tao Yao</i>	
A Method for Two-stage Stochastic Programming with Mixed 0-1 Integer Second Stage (836)	3135
<i>Yuping Huang, Qipeng Zheng</i>	
Modeling Defined Benefit Pension Plans: Basic Dynamics (29)	3136
<i>Robert McCrory</i>	
Modeling Defined Benefit Pension Plans: Basic Metrics (30)	3146
<i>Robert McCrory</i>	
Incorporating Attribute Value Uncertainty into Decision Analysis (488)	3156
<i>Dennis Leber, Jeffrey Herrmann</i>	
Path Planning Under Uncertainty: Canadian Traveler Problem Applied to Relief Routing (814)	3166
<i>Selina Begum, William Ferrell</i>	
Supervised Learning Algorithms for Datasets Under Uncertainty (333)	3167
<i>Petros Xanthopoulos</i>	
Stochastic Model for Revenue Management with Upgrading and Group Booking (1390)	3168
<i>Yihua Li, Luz Caudillo</i>	
Uncertainty of Scheduling Operations in Maritime Transportation Systems (744)	3169
<i>Zoila Guerra De Castillo, John Jackman</i>	
Process Improvement at a Major Bottling Company (1446)	3170
<i>Geoffrey Cheung</i>	
A LASSO-based Multivariate Control Chart for Process Monitoring and Diagnosis (474)	3171
<i>Jinho Kim, Myong K Jeong, Abdel Hamouda, Khalifa Al-Khalifa, Elsayed Elsayed</i>	
Economic Study of Heterogeneous Catalysis Biodiesel Production on the EcoComplex (750)	3172
<i>Joseph Akyeampong, Quentin Brown, Talal Ahmed, Jeremy Ferrell, Emmanuel Baisie, Silvanus Udoka, Zhichao Li, Ji Shen</i>	
Biodegradable Plastic Bag Generation with Organic Waste (642)	3182
<i>Karen Yohana Perdigon, Johan Otalora, Jenny Gomez, Leidy Soraida Veloza Patiño</i>	
Optimization of Biogas Production Process in a Wastewater Treatment Plant (536)	3183
<i>Xiupeng Wei, Andrew Kusiak</i>	
Simulation-based Economic Feasibility Analysis of Grafting Technology for Propagation Operation (666)	3192
<i>Chao Meng, Dong Xu, Young-Jun Son, Chieri Kubota</i>	
Developing Generic 'Cost Based MIS Modules' for Process Oriented System (1029)	3202
<i>Balbinder Deo, Jaspreet Sra</i>	
Adaptability of Lean Manufacturing among Small and Medium Food Processing Enterprises (277)	3213
<i>Manoj Dora, Dirk Van Goubergen, Maneesh Kumar, Adrienn Molnar, Xavier Gellynck</i>	
Scheduling A Batch Processing Machine to Minimize Total Weighted Tardiness (244)	3222
<i>Nazanin Zinouri, Rochelle Muskeyvalley, Purushothaman Damodaran, Omar Ghrayeb</i>	
Sequence-based MILP Modeling for Flexible Job Shop Scheduling (655)	3232
<i>Vahid Roshanaei, Hoda Eimaraghy, Ahmed Azab</i>	
A Multi-objective Fixed Product Flexible Open Shop Problem (1044)	3241
<i>Casey Trail, José Ventura</i>	
Preemptive Single Machine Scheduling with Setups to Minimize the Total Number of Delayed Jobs (148)	3247
<i>Xiaoyun Xu</i>	
Ant Colony Optimization For Split Delivery Vehicle Routing Problem (213)	3248
<i>Gautham Rajappa, Joseph Wilck, Xueping Li</i>	
Schedule Elective Surgeries to Operating Rooms Using Constraint Programming (221)	3249
<i>Zhaoxia Zhao, Xueping Li, Xiaoyan Zhu</i>	
Multi-Level Inventory Matching and Order Planning for Steel Plants via Particle Swarm Optimization (776)	3250
<i>Qipeng Zheng</i>	
Inventory Control in Hybrid Manufacturing System with fixed Set-up Costs (334)	3251
<i>S. Phil Kim, Seokcheon Lee, J. George Shanthikumar</i>	
GRASP Algorithm to Minimize Makespan in a No-Wait Flow Shop with Batch Processing Machines (201)	3260
<i>Shanthi Muthuswamy, Jairo Maya, Mario C. Velez-Gallego, Miguel Rojas-Santiago</i>	
Robust Integrated Production Planning and Order Acceptance (197)	3270
<i>Tarik Aouam, Nadjib Brahimi</i>	

Makespan Minimization on a Single Machine Subject to Job Release Dates and Sequence Dependent Setup Times (464)	3280
<i>Mario C. Velez-Gallego, Jairo R. Montoya-Torres, Santiago Ruiz, Sebastian Londono</i>	
Scheduling Unrelated Parallel Machines with Sequence Dependent Setup Times to Minimize Makespan (497)	3290
<i>Purushothaman Damodaran, Harsh Vardhan Sharma, Reinaldo Moraga</i>	
Scheduling a Job Shop with a BPM Using Simulated Annealing (499)	3300
<i>Miguel Rojas-Santiago, Mario C. Velez-Gallego, Shanthi Muthuswamy, Purushothaman Damodaran</i>	
The Weibull Urgency Index (WUI) Job Dispatching Heuristic (278)	3310
<i>Ivan Guardiola, Fermin Mallor</i>	
An Integrated Framework for Operational and Strategic Workforce Planning (298)	3311
<i>Shrikant Jarugumilli, Scott Grasman</i>	
Minimizing Fill-time Window in the Central Fill Pharmacy (1315)	3312
<i>Debiao Li, Sang Won Yoon</i>	
A Simulation-based Optimization Heuristic Using Self-organization for Complex Assembly Lines (1409)	3322
<i>Evangelos Angelidis, Daniel Bohn, Oliver Rose</i>	
Predictability of Simulation Results for Production Systems (899)	3323
<i>Doug Timmer, Hernando Garrido, James Ignizio</i>	
Minimizing Total Weighted Tardiness for Parallel Machines with Machine Eligibility Restrictions (757)	3324
<i>Ali Hajjaghabozorgi, Christopher Geiger, Vernet Lasrado</i>	
Stochastic Identical Parallel Machine Scheduling to Minimize the Number of Risky Jobs (800)	3325
<i>Gokhan Egilmez, Can Celikbilek, Gürsel Sür</i>	
An Approach for Simultaneous Line Balancing and Production Scheduling (956)	3334
<i>Kingsley Gnanendran, Manu Madan, Arunachalam Narayanan</i>	
A Flow Shop Sequencing Problem with Synchronous Material Transfers (189)	3335
<i>José A. Ventura, Kwei-Long Huang, Abraham Mendoza</i>	
Parallel Machine Scheduling with Batch Order Setups to Minimize the Total Number of Delayed Jobs (113)	3341
<i>Xiaoyun Xu</i>	
Unrelated-Parallel Machine Scheduling with Dual Resources (209)	3342
<i>Yasaman Mehravaran, Rasaratnam Logendran</i>	
A New Mathematical Formulation for a Single Machine Problem with Sequence Dependent Setup Time (1440)	3351
<i>Zhe Liang</i>	
Integrated Network Design and Scheduling Problems with Release Dates (160)	3352
<i>Sarah Nurre, Thomas Sharkey</i>	
Integrated Mitigation and Restoration Problem for Interdependent Civil Infrastructure Networks (161)	3353
<i>Burak Cavdaroglu, John Mitchell, Thomas Sharkey, William A. Wallace</i>	
Network Resiliency Models Incorporating Post-Event Scheduling Decisions (745)	3354
<i>Sarah Nurre, Jiaming Qiu, Thomas Sharkey</i>	
Staffing Level Decisions in a Dual Resource Constrained Job Shop. (616)	3355
<i>Benjamin Lobo, Thom Hodgson, Russell E. King, Kristin Thoney, James Wilson</i>	
Mass Customized Large Scale Production System with Learning Curve Consideration (1004)	3356
<i>Kuowei Chen, Richard Storch</i>	
An Extended Critical Path Method for Complex Assembly Lines (1405)	3357
<i>Evangelos Angelidis, André Naumann, Oliver Rose</i>	
An Applicable Strategy for Scheduling Optimization in Multi-stage Flexible Manufacturing (415)	3365
<i>Zhuo Tan, Richard Wysk</i>	
A Two Stage Algorithm to Design and Assess Product Family (518)	3373
<i>Evrin Yuzgec, Nagen Nagarur, Azmi Alazzam</i>	
A State Independent Search Algorithm In Single-Machine Job Scheduling (935)	3382
<i>Ali Saboonchi, Amir Azamtarrhian</i>	
Simulating Production Strategies at a Low-Volume, High-End Electronics Manufacturer (1210)	3390
<i>Corinne Macdonald, Eldon Gunn, Eric Giacomini</i>	
A Heuristic to Integrate External and Internal Setup Times (153)	3400
<i>M. T. Yazdani Sabouni, Rasaratnam Logendran</i>	
Bi-Criteria Group Scheduling Problem on a set of m Unrelated-Parallel Machines (154)	3409
<i>Mir Abbas Bozorgirad, Rasaratnam Logendran</i>	
Batch and Discrete Processor Scheduling With Blocking Constraint (198)	3410
<i>Hadi Panahi, Rasaratnam Logendran</i>	
Assessment of Manufacturing Lead Time Using Neural Network Analysis (517)	3420
<i>Evrin Yuzgec, Nagen Nagarur, Azmi Alazzam</i>	
Prioritizing Customer Orders in a High-End Server Manufacturing Environment Using Artificial Neural Networks (472)	3427
<i>Faisal Aqlan, Sarah Lam, Keila Martinez</i>	
Experimental Analysis of Aggregate Planning with Flexibility Requirements Profile in Automotive and Textile Industries (929)	3435
<i>Edil Demirel, Ertunga Ozelkan, Churlzu Lim</i>	
Hierarchical Production Planning: A Ceramics Company Case Study (1348)	3444
<i>Nagen Nagarur, Du Nguyen</i>	
Adaptive Production Scheduling for a Make-To-Order DNA Manufacturing System (1406)	3445
<i>Dan Song, Jun Zhang, Jing Shi</i>	

Magnitude Robust Control Charts for Monitoring Normal Process Dispersion (617)	3455
<i>Joseph Pignatiello, Sean Wolf, Raymond Hill</i>	
Monitoring Quadratic Behavior with Non-Constant Standard Deviation (863)	3462
<i>Jose Guillermo Ramirez-Galindo, Carmen Temblador-Perez, Mario Beruvides, Alvaro Cordero Franco</i>	
Change-Point Estimation and Control Chart for Variance Based on P-Value Function of the F Statistic (983)	3469
<i>Víctor Tercero-Gómez, Alvaro Cordero Franco, Jose Guillermo Ramirez-Galindo, Iris Martínez-Salazar</i>	
A Novel Weighted Average Method for Measuring Suppliers' Product Quality Based on Normal Distribution (9)	3477
<i>Soroush Avakh Darestani</i>	
Voice of the Customer: Customer Satisfaction Ratio Based Analysis (1357)	3484
<i>Celestine Aguwa, Leslie Monplaisir, Ozgu Turget</i>	
A Note of Remaining Life Assessment and Performance Degradation (790)	3485
<i>Huitian Lu, Yue Song</i>	
Impact of ISO 9001 on Brazilian Automotive Sector Performance (843)	3486
<i>Roberto Antonio Martins, Danielle Fernandes Campos, João Batista Turrión</i>	
Dempster-Shafer Theory Approach to FMEA (97)	3496
<i>Niranjan Kulkarni, Aric Johnson</i>	

VOLUME 5

Evaluating HUBzero as a Collaboration Platform for Reliability Engineering (698)	3506
<i>Gaurav Nanda, Jonathan Tan, Peter Auyeung, Mark Lehto</i>	
System Interaction Failure Analysis of Fuel Injection System Using Cognitive Map-based Approach (771)	3512
<i>Shah Limon, Om Prakash Yadav, Canan Bilen</i>	
Statistical Modeling of Multicomponent Repairable Systems under Imperfect Component Repair (806)	3522
<i>Qingyu Yang, Nailong Zhang</i>	
A Study of Circle Chart for Multivariate Process Characteristics (1008)	3523
<i>Min Xie, Thong Ngee Goh, Peipei Deng</i>	
A Prognostic Framework for Individual Unit Residual Life Distribution (523)	3524
<i>Qiang Zhou, Shiyu Zhou, Xiaofeng Mao, Mutasim Salman</i>	
A Hybrid Inference Approach for Health Diagnostics with Unexampled Faulty States (527)	3525
<i>Pingfeng Wang, Prasanna Tamilselvan</i>	
A Framework for Quantifying Sustainability of Lean Implementation in Healthcare Organizations (810)	3526
<i>Ahmad Elshennawy, Haitham Bahaiham</i>	
Relative Performance of Shewhart and EWMA p and g Statistical Control Charts for Monitoring Adverse Healthcare Event Rates (1086)	3527
<i>Zeynep Karakus, Aysun Taseli, James Benneyan</i>	
Profit Maximization for Durable Goods Considering Warranty and Post-warranty Service (172)	3535
<i>Wei Xie, Haitao Liao, Xiaoyan Zhu</i>	
Optimal System Structure with Different Imperfect Fault Coverage (1037)	3536
<i>Rui Peng, Huadong Mo, Ola Tannous, Min Xie</i>	
Reliability Bounds on Customer-centered Performance Measures for Multi-state Systems (1291)	3544
<i>Carlos Solorio Magaña, Kailash Kapur</i>	
Statistical Quality Techniques to Service Science and Engineering (1111)	3554
<i>Fugee Tsung</i>	
SMAC&SMERT: Methods from the New Paradigm of Statistics and OR (332)	3555
<i>Theodore Allen</i>	
Quantification of Economic and Environmental Benefits for Prognosis Informed Wind Farm Operation and Maintenance (531)	3556
<i>Prasanna Tamilselvan, Pingfeng Wang, Janet Twomey</i>	
Reliability Analysis of Systems with Dependent Degrading Components based on Thermodynamic Physics-of-Failure Analysis (43)	3566
<i>Lei Jiang, Qianmei Feng, David Coit</i>	
Weibull Parameters Estimation Based on Physics of Failure Model (837)	3574
<i>Erik Kostandyan, John Sørensen</i>	
Examining the Crack Growth-based Material Failures through Hierarchical Linear Models (1433)	3584
<i>Zhaojun Li, Huimin Xiong</i>	
An Adaptive Bayesian Approach for Robust Parameter Design with Observable Time Series Noise Factors (1422)	3585
<i>Arda Vanli</i>	
Prognostics-based Preventive Replacement and Competition in Service Part Procurement (174)	3586
<i>Haitao Liao, Faranak Fathi</i>	
Sensitivity Analysis for Reliability-Based Maintenance Decisions (631)	3587
<i>Kaycee Wilson, Kash Barker</i>	
Joint Manufacturing and Marketing Decision Analytic Model (588)	3588
<i>Mahmood Al Kindi, Ali Abbas</i>	
A Simple Interval-Valued Decision Tree with Application in Maintenance Decision Making (624)	3598
<i>Kaycee Wilson, Kash Barker</i>	
Multi-objective Optimization Approach Considering Correlation Among Quality Characteristics (766)	3606
<i>Ganesh Thambidorai, Om Prakash Yadav, Bimal Nepal</i>	

Connecting Nested 2^k Fractional Factorial Designs with Optimal Treatment-Combination Sequencing (1013)	3607
<i>Hsiao-Shen Tsao, Minnie Patel</i>	
Protective Coating Specifications on Steel Plate - A Case Study (1209)	3608
<i>Mohammad Rahman, John Young</i>	
Performance Analysis of Multi-Response Robust Design Optimization Methods (1411)	3609
<i>Xingyan Wang, Nasser Fard</i>	
Redesigning the SKU Creation Process Using Design for Six Sigma (320)	3619
<i>Jamison Kovach, Melissa Haught, Vikram Tiwari</i>	
Reducing Defects in the Production of Natural Gas Dehydration Equipment (431)	3629
<i>Cameron Croft, Jamison Kovach</i>	
Improving The Performance of Healthcare Systems with Six Sigma: Course-Based Case Studies (1082)	3638
<i>Ahmad Elshennawy</i>	
Lean Six Sigma Non Analytical Tools in the Innovation Phase (1194)	3639
<i>Andrés Felipe Arango Gómez, Carmen Temblador Perez</i>	
An Evolutionary Optimization Approach to Reliability-based Robust Design Model (762)	3645
<i>Vijay Rathod, Om Prakash Yadav, Ajay Rathore, Rakesh Jain</i>	
Novel Uses of Anomaly Text Data for Reliability and Risk Mitigation (871)	3654
<i>Mahdi Alimardani, Luis D Gallo, Guangming Chen</i>	
A Model for Reliability Analysis of Multi-state Manufacturing Systems (380)	3663
<i>Seyed Niknam, Rupy Sawhney, Isaac Atuahene</i>	
A Viral System Optimization Algorithm to Solve the Wind Farm Layout Problem Considering Reliability (44)	3664
<i>Jose Francisco Espiritu, Carlos Ituarte-Villarreal</i>	
Reliability and Cost Assessment of Energy System with Wind and Solar Cogeneration (45)	3673
<i>Tongdan Jin</i>	
Practical Maintenance Optimization for Wind Turbine Systems Based on Analytical Methods (107)	3674
<i>Fangfang Ding, Zhigang Tian</i>	
Engineering Driven Reconfigured Tree based Variation Reduction Considering Uncertainties (808)	3675
<i>Ran Jin</i>	
Semi-parametric Modeling of Series System Reliability with Multi-level Information Aggregation (809)	3676
<i>Mingyang Li, Jian Liu</i>	
Birnbaum-Saunders Model for Fatigue Life Prediction under Different Stress Types (93)	3677
<i>Yao Cheng, Elsayed Elsayed</i>	
Reliability Metrics of Components with Multiple Degradation Paths (276)	3678
<i>Xiao Liu, Jingrui Li, Khalifa Al-Khalifa, Abdel Hamouda, Elsayed Elsayed, David Coit</i>	
Remaining Useful Life of Batteries: Effects of Internal Electrochemical Reactions (662)	3679
<i>Bernard Sefogah, Manju Maharjan, Huitian Lu</i>	
Rule-based Methods for Diagnosing Out-of-control Signals (551)	3680
<i>Saylisse Davila, George Runger, Miralis Torres Burgos</i>	
Using Multiple Imputation on Design of Experiments with Multiple Responses (722)	3690
<i>Suleima Alkusari, Clara Novoa, Bahram Asiabanpour</i>	
Control Charts for an AR(1) Process with Exogenous Variables (910)	3691
<i>Becky Vela, Doug Timmer, Miguel González</i>	
Reliability Growth Testing for a Complex System Using both Accelerated and Fielded Testing Data (1432)	3692
<i>Zhaojun Li, Muhammad Pervaiz, Tongdan Jin</i>	
Stress Loading Sequence and Design of Reliability Test Plans (168)	3693
<i>Michael Koskulics, Elsayed Elsayed</i>	
Nonparametric Bayesian Modeling for Accelerated Life Testing (441)	3694
<i>Xi Liu, Tao Yuan</i>	
Multilinear Principal Component Analysis for Multichannel Nonlinear Signals (846)	3695
<i>Kamran Paynabar, Judy Jin, Massimo Pacella</i>	
Application of ICA-SVM As a Process Monitoring in the Automotive Industry. (1096)	3696
<i>Victor Cortes, Edgar Omar Resendiz Flores</i>	
Generalized Control Chart for Variance Based on the P-Value of Chi Square Test (984)	3697
<i>Alvaro Cordero Franco, Víctor Tercero-Gómez, Jose Camacho Vallejo, Rosa González-Ramírez</i>	
Tolerance Design: Modeling Highly Unpredictable Processes (364)	3702
<i>Paul Goethals, Byung Rae Cho</i>	
Real-time Identification of Incipient Surface Morphology Variations in the Ultra-Precision Machining Process (647)	3703
<i>Prahalada Rao, Omer Beyca, Satish Bukkapatnam, Zhenyu Kong</i>	
System Uncertainty Quantification with Insufficient and Subjective Data Sets (993)	3704
<i>Zhimin Xi, David Rodrick</i>	
The Mitigation Strategy Taxonomy: Organizing and Classifying Risk Mitigation Strategies (644)	3705
<i>Daniel Krus, Katie Grantham</i>	
Analyzing the Hard-Brake Process for Semiconductors using SPC (946)	3715
<i>Ali Saboonchi, Armstead Jones Jr., Guangming Chen</i>	
Recurring Pattern Identification in a Six Sigma Project (1256)	3716
<i>Daniel Moreno Sanchez, Carmen Temblador, Gabriel De La Torre Castro</i>	
Petri Nets Application and Implementation on New Service Development (897)	3723
<i>Sameer Tabbakh, Anweshana Vaizasatya, Shu Wan, Zhichao Li, Paul Stanfield</i>	

Maximizing Service Availability on Tree Networks Vulnerable to Disruptions (11)	3733
<i>José Santiváñez, Emanuel Melachrinoudis</i>	
Joint Capacity and Demand Allocation for a Service Delivery Network (357)	3743
<i>Qi Yuan, Xiaoyan Zhu, Alberto Garcia-Diaz</i>	
Framework for Information Technology-Integrated Service Design (825)	3751
<i>Sameer Tabbakh, Paul Stanfield, Bala Ram, Lauren Davis</i>	
Global Sourcing and Vendor Risk Management in Supply Chains (32)	3752
<i>Ravi Ravindran</i>	
Robust Optimization Modeling for Equitable Food Distribution under Capacity Constraints (254)	3753
<i>Irem Sengul, Julie Simmons Ivy, Reha Uzsoy</i>	
Predicting the Supply of Donated Goods (614)	3763
<i>Jessica Terry, Lauren Davis, Steven Jiang</i>	
Empirical Modeling of Demand for a Local Food Bank (917)	3764
<i>Anyama Okore-Hanson, Harold Winbush, Lauren Davis, Steven Jiang</i>	
Using Agent-Based Simulation to Model Equitable Food Distribution (1191)	3774
<i>Ashley Banerjee</i>	
Modeling the Adherence to National Guidelines for Acute Care of Children with TBI (279)	3775
<i>Sarah Golla, David Neyens, Linda Boyle, Mary Kernic, Monica Vavilala</i>	
The Effect of Competition on Supply Chain Decision Making (280)	3776
<i>John Hill, Pablo Liadro</i>	
Air Versus Ground Vehicle Decisions for Interfacility Air Medical Transport (448)	3784
<i>Arsham Fatahi, Birsen Donmez, Mahvareh Ahghari, Russell Macdonald</i>	
A Multi-agent Framework for the Co-evolution of Social Service Delivery Networks and Population Dynamics (857)	3792
<i>Oscar Herrera Restrepo, Alexandra Medina-Borja</i>	
Uncovering Complex Relationships in System Dynamics Modeling: Exploring the Use of CHAID (1417)	3802
<i>Alexandra Medina-Borja, Mariana Toro</i>	
Computational Evaluation of Social Service Network Dynamics Using Window Analysis (202)	3803
<i>Tim Duket, Alexandra Medina-Borja</i>	
Capacity Analysis for Health Care Institutions: A Case of Study (864)	3812
<i>Jorge Victoria, Ciro Alberto Amaya, Nubia Milena Velasco Rodríguez</i>	
Application of the Queuing Theory to Assess the Emergency Response Team's Operation in an American Football Stadium (773)	3813
<i>Isaac Atuahene, Rupy Sawhney, Grace Bema Yeboah, Samuel Ato Akorful-Andam</i>	
A Planning Model for WHO-EPI Vaccine Distribution in Developing Countries (485)	3821
<i>Sheng-I Chen, Jayant Rajgopal, Bryan Norman</i>	
Demand Estimation for Service Enterprises When Unobserved Substitutions are Present (1212)	3822
<i>Lihua Bai, Niva Shrestha, Nazrul Shaikh</i>	
Optimization Of a Cash Supply Chain With Uncertain Demand (1246)	3823
<i>Hector Toro Diaz, Andres Felipe Osorio</i>	
Selection of Service Contracts with On-site Spare Part Options (376)	3824
<i>Daniel Mo, Mitchell Tseng, Raymond Cheung</i>	
Feature Extraction Using Rough Set Theory in Service Sector from Incremental Perspective (554)	3834
<i>Chun-Che Huang, Bill Tseng, Chia-Ying Tang, Meng Ying Shen</i>	
A Multi-Scale Framework for Pedestrian Behavior Model at Signalized Crosswalks (1034)	3844
<i>Hui Xi, Young-Jun Son</i>	
A New Fuzzy Logic Approach to Dynamic Dial-a-Ride Problem (195)	3855
<i>Maher Maalouf, Cameron Mackenzie, Sridhar Radakrishnan, Mary Court</i>	
Predicting Public Donations for Nonprofit Organizations Using CHAID (397)	3863
<i>Mariana Toro, Alexandra Medina-Borja</i>	
Closed-Loop Supply Chain Network Design under Demand and Return Uncertainty (1331)	3864
<i>Halit Uster, Sung Ook Hwang</i>	
Design of a Simulation-based Platform for Assessment of Sustainability Initiatives in Pueblo County (1146)	3865
<i>Leonardo Bedoya-Valencia, Wareef Najjar</i>	
The Organization of Sustainability Metrics based on Utility through Explanatory Factor Analysis (875)	3866
<i>Kijung Park, Kelly Sprehn, Gul Okudan</i>	
Scenario Optimization Approach for Designing Supply Chain and Logistics Model of Switchgrass (65)	3876
<i>Bhavna Sharma</i>	
A Techno Economic Analysis of Pipelining Wastewater Sludge Transportation (266)	3877
<i>Mohammad Marufuzzaman, Sandra Eksioglu, Andro Mondala</i>	
Simulation-based Decision Support System for Sustainable Coalmining Operations (563)	3885
<i>Sai Srinivas Nageshwaranier, Chao Meng, Amir Maghsoudi, Young-Jun Son, Sean Dessureault</i>	
The Influence of Environmental Marketing in Consumer Purchase Decision: A Case Study with Brazilian Consumers (33)	3895
<i>Eduardo Cruz, Rafael Faria, Fabio Silva, Carlos Fontanillas</i>	
Assessing the Sustainability Performance of U.S. Industrial Sectors: A Life Cycle Assessment Approach (1269)	3905
<i>Gokhan Egilmez, Murat Kucukvar, Omer Tatari</i>	
A Systems Approach to Environmental Studies (3)	3906
<i>Leeann Racz</i>	

Evacuation Transportation Planning for Multiple Hospitals (583)	3912
<i>Esra Agca, Douglas Bish, Roger Glick</i>	
Approaches to Approximate Contributions Received from Supermarkets by Food Banks (1177)	3913
<i>Luther Brock, Lauren Davis</i>	
Supporting the Evaluation of Sustainability by Listening In to Populations (884)	3923
<i>Colleen Phillips</i>	
Diffusion Dynamics Over Small Worlds: An Investigation into the Effect of Chosen Methods (1025)	3932
<i>Mohammadmir Mohtashami, Nazrul Shaikh</i>	
Reverse Logistics System for Portable Batteries: the Case of Spain (95)	3933
<i>Eva Ponce-Cueto</i>	
Sustainable Product Returns: A Life Cycle Based Decision Making Analysis (152)	3934
<i>Jennifer Pazour, Omer Tatari, Faraz Ramtin</i>	
Overview of Solid Waste Management in Galapagos Islands (1099)	3935
<i>Eva Ponce-Cueto, Edgar Blanco, Ximena Cordova-Vallejo</i>	
Characterization of Mechanical Properties and Compostability of Fiber-Reinforced Bio-Composites (77)	3936
<i>Truc Ngo, Caitlin Lambert, James Kohl</i>	
Towards Sustainable Commodity Biomaterials from Red Chile Pepper Stems and Polymers (84)	3937
<i>Delia J Valles-Rosales, Haytham Alodan, Steven Hespeler, Alejandro Alvarado-Iniesta, Ivan Rodriguez</i>	
Development of Sustainable Metrics for Assembly Processes and Products (85)	3938
<i>Shaw Feng</i>	
Total Life-cycle Based Metrics for Product Sustainability Assessment (960)	3939
<i>Mohannad Shuaib, Aihua Huang, Xiangxue Zhang, Fazleena Badurdeen, Shaw Feng, Keith Rouch, I. S. Jawahir</i>	
The Impact of the Social Sustainability in the Industrial Engineering Profession (377)	3940
<i>Eliseo Vilalta-Perdomo, Ricardo Thierry-Aguilera</i>	
Curauá Fiber As Alternative Thermal Insulation (1143)	3941
<i>Rita Engler, Orlando Gama</i>	
Climate Change Detection and Attribution of Infrared Spectrum Measurements (1161)	3949
<i>Nipa Phojanamongkolkij, Peter Parker, Marty Mlynczak</i>	
A Framework for Optimizing the Supply Chain Performance of a Steel Producer (20)	3956
<i>Raid Al-Aomar, Mahmoud Alrefaei, Ali Diabat</i>	
Bi-objective Design of Manufacturing Supply Chains by Intelligent Water Drop Metaheuristic (479)	3957
<i>Luis A. Moncayo-Martinez, Josué Miguel Gonzalez-Rodriguez</i>	
Designing Treatment Protocols to Mitigate Supply Chain Cost (988)	3958
<i>Lakausha Simpson, Paul Stanfield</i>	
Supply Chain Modeling Scope and Methodology: A Review of Literature in the Last Decade (414)	3959
<i>Chandrakumar Badole, Bimal Nepal, Ajay Rathore, Rakesh Jain</i>	
Trading Agent's Ordering and Shipping Strategies Using Bayesian Analysis (1215)	3969
<i>Mohammad Rahman, Asheka Rahman</i>	
Demand Planning for Chilled Dairy Products (1182)	3970
<i>Paola Zepeda, Rodolfo Mendoza Gómez, Karla Valenzuela</i>	
Simulation-based Evaluation for the Feasibility Analysis of Product Design Changes (1162)	3971
<i>Dong Xu, Santosh Mungle, Sai Srinivas Nageshwaranier, Young-Jun Son</i>	
Using Higher-Order Moments in Lead Time Demand Models (74)	3981
<i>Yasin Unlu, Manuel Rossetti</i>	
A Supply Chain Model of Deteriorating Items with Raw Materials Storage Costs (589)	3991
<i>Bingqing Wu, Bhaba Sarker</i>	
Using AHP and Inventory Control Models for Supply Chain Decisions (679)	4001
<i>Aditi Dwivedi, Namkyu Park, Gürsel Sür</i>	
On Supply Chain Viability (26)	4002
<i>Mariah Magagnotti, Scott Mason, Chase Rainwater, Jessica Heier Stamm, Edward Pohl</i>	
Collaboration Platform for Supply Chain Utilizing Bidirectional Information Sharing (1231)	4003
<i>Shawn O'Keeffe, Mohammad Rahman</i>	
Collaborative Demand and Capacity Sharing among Manufacturers on the Same Supply Network Horizontal Layer (966)	4004
<i>Hyesung Seok, Shimon Nof</i>	
A Market-Based Approach to Adaptive Reconfigurable Supply Networks (813)	4013
<i>Manuel Scavarda, Rodrigo Medel, Seokcheon Lee, Shimon Nof</i>	
Dynamic Vehicle Routing for Disaster Response With Time-varying Travel Time and Fairness Measures (1113)	4023
<i>Zhili Zhou, Peter Rimshnick</i>	
Integrated Blood Collection and Appointment Scheduling (272)	4024
<i>Azadeh Mobasher, Ali Ekici, Okan Orsan Ozener</i>	
Optimizing the Timing of Vaccine Shipments (575)	4033
<i>Bryan Norman, Jayant Rajgopal, Pei-Shan Hsieh</i>	
Supply Chain Coordination with Supplier-facilitated Transshipments (314)	4034
<i>Jennifer Ryan, Rong Li, Zhi Zeng</i>	
A Study on Crate Sizing Problems (1151)	N/A
<i>Shih Jia Lee, Ek Peng Chew, Loo Hay Lee, Julius Thio</i>	
Evaluating Alternative Transportation Methods and Shipping Quantities in Cellular Manufacturing (1275)	4044
<i>Can Celikbilek, Gürsel Sür</i>	

Conditional Value-at-Risk for Hazardous Materials Transportation on Time-Dependent Networks (1337)	4052
<i>Iakovos Tournazis, Changhyun Kwon</i>	
Optimal Policies for Multi-Item Temporal Shipment Consolidation (1066)	4053
<i>Sila Cetinkaya, Bo Wei</i>	
Vehicle Routing with Cross Docks (701)	4054
<i>Chase Murray</i>	
Condition Based Spare Parts Supply (1385)	4055
<i>Rob Basten, Xiao Lin, Bram Kranenburg, Geert-Jan Van Houtum</i>	
A CPFR Readiness Model for Healthcare Supply Chains (963)	4056
<i>Tanvir Sattar, Manuel Rossetti, Edward Pohl, Vijith Varghese</i>	
Design of Two-Stage Procurement Processes with Imperfect Information (390)	4057
<i>Walter Yund, Jennifer Ryan, Yue Jin</i>	
Multi-Echelon Supply Chain Network Simulator Using Cloud Computing (434)	4067
<i>Manuel Rossetti, Yaohua Chen</i>	
Truckload Freight Transportation Utilizing Relay Points to Improve Driving Jobs (1221)	4068
<i>Kerry Melton, Ricki Ingalls</i>	
Retrospective Optimization for Supply Chain Risk Mitigation (1423)	4078
<i>Phil Kaminsky, Giulia Pedrielli, Lee Schruben, Ming Yuen</i>	
An Inventory Model with Restricted Replenishment Opportunities and Re-estimated Demand (181)	4079
<i>Nils Buch, Russell E. King, Ana R. Vila-Parrish, Donald P. Warsing</i>	
An Inventory Replenishment Model with Delivery Mode Splitting (182)	4088
<i>Joseph Geunes, Cinthia Perez</i>	
Infinite Horizon Periodic Review Perturbed Demand Model with Lead Time (183)	4089
<i>James Lavin, Russell E. King, Donald Warsing, Ana Vila-Parrish, Semra Sebnem Ahiska</i>	
An Agent-Based Model to Improve Operations in a Healthcare Warehouse (177)	4097
<i>Brian Heath</i>	
Multi-echelon Network Optimization of Pharmaceutical Cold Chains (178)	4098
<i>Suman Niranjana, Niranjana Kulkarni</i>	
Inventory Replenishment Planning for a Nuclear Pharmacy Network (187)	4107
<i>Jon Goodstein</i>	
VMI and Automation in Healthcare Logistics under the PPACA (394)	4108
<i>Stephen Spulick, Suman Niranjana</i>	
Maximizing Rental Fleet Profitability using Repositioning Strategies (37)	4109
<i>Debjit Roy, Jennifer Pazour</i>	
Performance Modeling of a Two-Echelon Supply Chain with Inventory Visibility (1414)	4110
<i>Sandeep Srivathsan, Manjunath Kamath</i>	
Base-stock Policy for a Manufacturing System with Periodic Demands (1342)	4120
<i>Sanket Bhat, Ananth Krishnamurthy</i>	
Cross-dock Scheduling with Controllable Truck Handling Times (495)	4129
<i>Maxim Dulebenets, Dincer Konur, Mihalis Golias</i>	
Evaluation of Intermodal Marine Container Terminal Gate Strategies Via Simulation (500)	4130
<i>Jeffery Karafa, Curt Heaslet</i>	
The Berth Allocation Problem with Stochastic Vessel Handling Times (501)	4131
<i>Mihalis Golias, Stephanie Ivey, Georgios Saharidis</i>	
Inbound Truck Scheduling at Cross-docks with Truck Arrival Time Uncertainty (494)	4132
<i>Dincer Konur, Mihalis Golias</i>	
A Multi-level Inventory Control Model for File System Prefetching via Simulation (215)	4133
<i>Cong Guo, Xueping Li, Yang Sun</i>	
Sustainable Vehicle Routing with Multiple Objectives (222)	4143
<i>Joseph Wilck, Gautham Rajappa, Xueping Li</i>	
A Robust Facility Location Model Using Two Stage Optimization Approach (1171)	4144
<i>Yu An</i>	
A Network Model for Location-routing Decisions of a Logistics Company (1156)	4145
<i>Funda Samanlioglu, Ahmet Yucekaya, Zeki Ayag</i>	
Service Rate Improvement for a Three-Echelon Supply Chain System (586)	4151
<i>Bhaba Sarker, Ratkrit Rochanaluk, Bibhas Giri</i>	
Growth Strategies Used By European Logistics Providers (1184)	4160
<i>Lee Wilkerson, Mohammad Rahman</i>	
End of Life Product Strategies and Analysis: A Case Study (1349)	4161
<i>Nagen Nagarur, Ketan Savale</i>	
Evaluation of Transportation Practices in the California Cut Flower Industry (350)	4162
<i>Christine Nguyen, Alejandro Toriello, Maged Dessouky, James Moore</i>	
An Empirical Study on Time-Dependent Vehicle Routing (1195)	4163
<i>Qian An, Ugur Demiryurek, Cyrus Shahabi</i>	
Cyclic Distribution Strategies for Inventory Routing Problem (329)	4164
<i>Ali Ekici, Okan Orsan Ozener, Gultekin Kuyzu</i>	
Solving Real-Life Railroad Problems: Block To Train Assignment and Train Routing (498)	4165
<i>Shokoufeh Mirzaei, Krishna Krishnan</i>	
A Multi-Dimensional Framework for Multimodal Transportation of Physical Internet Containers (995)	4175
<i>Hamza Heni, Driss Hakimi, Benoit Montreuil</i>	

Load Mixing for Container Loading (874)	4176
<i>Crystal Wilson, Sarah Root</i>	
Evaluating Supply Chains Based on Cost and Associated Risk (463)	4177
<i>Meredith Deneweth, Sankar Sengupta, Robert Van Til</i>	
Modeling Supply Chain Disruption Risk Management (1174)	4178
<i>Kanokporn Kungwalsong, Ravi Ravindran</i>	
A Discussion on Supply Chain Robustness and Resiliency (1267)	4188
<i>Aric Johnson, Nagen Nagarur</i>	
A Simulation of Severe International Supply Chain Disruptions (1124)	4198
<i>Cameron Mackenzie, Kash Barker, Joost Santos</i>	
Optimizing Supply Chain Decisions Under Uncertainty Utilizing Neural Networks (791)	4199
<i>Julie Drzymalski</i>	
A Framework for Managing Unexpected Events in Server Manufacturing Environment (351)	4200
<i>Faisal Aqlan, Sarah Lam, Sreekanth Ramakrishnan, Keila Martinez</i>	
Using RFID Technology in Logistics Process of Higher Education (542)	4207
<i>Jesus Gonzalo Palacios, Efrán Torres, Jorge Cano</i>	
A Study on Supply Chain Management and Technology Structure at Al-Hassan Industrial Estate in Jordan (1122)	4208
<i>Mahmoud Al-Odeh, Safwan Altarazi, Marion Schafer, M. Affan Badar</i>	
Improving the Supply Chain in the Town of Cuero Chapinero (1288)	4209
<i>Paola Rosero, Moreno Sergio, Ever Angel Fuentes Rojas</i>	
A System Dynamics Approach to Water Sustainability in Healthcare (1175)	4210
<i>Misagh Faezipour, Susan Ferreira</i>	
A DSM-Based Approach for Improving Electronic Medical Record Usability (483)	4218
<i>Kushtrim Kuqi, Thomas Holzer, Tim Eveleigh, Shahryar Sarkani</i>	
Design of Robust Interdependent Infrastructures with a Limited Budget (1364)	4219
<i>Guisselle Adriana Garcia Llinas, Rakesh Nagi, Moises Sudit</i>	
Design as a Strategy to Engineer Complex Socio-Technical Systems (1340)	4220
<i>Claudina Vargas</i>	
Decision Analytics for Safety Risk Modeling of Unmanned Aircraft Systems (8)	4221
<i>James Luxhoj, Raymond Sarlo</i>	
System Engineering Methodologies to Improve Test and Evaluation of Autonomous Vehicles (1016)	4231
<i>Richard Lewis</i>	
Sensitivity Analyses of Risk Factors and Mitigation Effects for a Wake Vortex Encounter Flight Scenario (46)	4232
<i>James Luxhoj, Kazim Topuz</i>	
Reference Architectures (1079)	4242
<i>Mary Bone, Robert Cloutier, Peter Korfiatis</i>	
Developing a Graphical CONOPS to Enhance Model-Based Systems Engineering (787)	4243
<i>Peter Korfiatis, Mark Blackburn, Teresa Zigh</i>	
A Roadmap to Systems Engineering Graduate Studies: One View (1448)	4252
<i>Massood Towhidnejad, Thomas Hilburn</i>	
Data Integration to Extend Product Data Management Systems to Predict Product Lifecycle (290)	4253
<i>Mahmoud Al-Odeh, Christopher Bell, M. Affan Badar</i>	
The Case For Asset-Based Systems Engineering (869)	4254
<i>Paul Stanfield, Lauren Davis, Steven Jiang</i>	
Supportability Measures Required to Reduce Maintenance Downtime of Commercial Vehicles (1107)	4255
<i>Mark Cecere, Tom Herald</i>	
Information Systems to Optimize the Network Collaboration during Disasters: Case of the Panama Humanitarian Logistics Hub (747)	4265
<i>Zoila Guerra De Castillo, Eduardo Caballero, Elizabeth Salgado</i>	
Knowledge Engineering's Role in Advancing Complex Decision Making Effectiveness (53)	4266
<i>Nargis Hossain, Shahram Sarkani, Thomas A. Mazzuchi</i>	
System Dynamics Application in Organizational Learning Evaluation (569)	4267
<i>Hong Jiang, Wilawan Onkham, Eddie Zeng, Luis Rabelo</i>	
Integration of NASA Systems Engineering Protocol into Software Defined Radio Technology Development (964)	4277
<i>Saeideh Sadat Bazargan, Ali Saboonchi, Guangming Chen</i>	
Tutorial: Layout Design of any Work System using the Production Flow Analysis and Simplification Toolkit (PFAST) Software (1436)	4278
<i>Shahrugh Irani</i>	
Tutorial: Production Systems Engineering: PSE Toolbox and Applications (1437)	4279
<i>Semyon Meerkov, Jingshan Li, Liang Zhang</i>	
Tutorial: Virtual LEED Review System (VLRS) (1253)	4280
<i>Shawn O'Keeffe, Mohammad Rahman</i>	
Tutorial: The Lean Engineer (1435)	4281
<i>J. T. Black</i>	
Tutorial: IE Evolution and Frontiers and Healthcare Frontiers (1419)	4282
<i>Steven Duket, Ken Musselman</i>	
Tutorial: IE Frontiers: What Research Is Needed (1421)	4284
<i>Steven Duket</i>	
Correlating Ergonomics, Quality, and Productivity (1069)	4285
<i>Vince Tappel</i>	

NASA-STD-3001, Space Flight Human-System Standard and the Human Integration Design Handbook (1216)	4286
<i>Jennifer Boyer, Keith Holubec, Mihriban Whitmore</i>	
The Work System Method: Systems Thinking for Business Professionals (353)	4295
<i>Steven Alter</i>	
Requirements for Description of a Production System for Optimal Control (354)	4305
<i>Edward S. Pound</i>	
Effect of Elbow Angles on Grip Strength and Endurance (654)	4306
<i>Fariborz Tayyari</i>	
Manufacturing Flow Time Reduction Utilizing Network Analysis and Critical Chain (593)	4307
<i>David Prestin, Nathan Bingman</i>	
IIE Work Systems Division (355)	4317
<i>Richard Elliott</i>	
An Update on the Knowledge Capture Activities Used by Boeing IEs (34)	4318
<i>David Skoor, Stephen Snelling, Majid Abab</i>	
Steps in the Implementation of an Effective Ergonomics Program (46)	4333
<i>Mark Stuart, Mark Arthun</i>	
Aligning Supply Chain and Business Strategies Through Risk-based Planning and Scheduling (RPS) (56)	4334
<i>David Sturrock, John Carson</i>	
Systems View of the Role of IE in a Complex and Dynamic Test Environment (135)	4346
<i>Catherine Wolfram, Molly Herford</i>	
Human Factors and the Culture of Technology in the Workplace (157)	4356
<i>Sean Genovese</i>	
Horizontal Stabilizer "Miss located" Brackets for Blade Seal Installation (103)	4371
<i>Luis Mendez</i>	

VOLUME 6

Placement of Decals by Laser Location (87)	4384
<i>Richard Cross</i>	
Conducting Operation Reviews at Boeing (108)	4385
<i>Shamshad Alam, Steve Snelling</i>	
Seeing Together, Learning Together, Doing Together: Development of a Lean Manufacturing Strategy with a Critical Japanese Supplier on the Boeing 787 Program (129)	4398
<i>Jared Sisk, Dominic Lenzini</i>	
Addressing Performance Improvement Challenges in a Construction Setting (234)	4410
<i>Kevin McManus</i>	
Integration of Partnering Concepts into Construction Projects (67)	4411
<i>George Gardner</i>	
Key Points to Succeed Applying Industrial Engineering in Construction (194)	4427
<i>Jorge Cossio</i>	
Lean Construction: A New Challenge and Opportunity for Industrial Engineers (61)	4450
<i>Lincoln Forbes</i>	
Application of Lean Principles in Construction Management (235)	4471
<i>John Gresh</i>	
Construction Division Town Hall Meeting (63)	4478
<i>Lincoln Forbes, Lincoln Forbes, George Gardner, Laura Ikuma, Brian Kleiner, Isabelina Nahmens</i>	
Occupational Vibration Exposure Assessment Among Stone Workers in Taiwan/China (167)	4479
<i>Farman Moayed, Yuan-Hsin Cheng</i>	
Optimizing Design and Construction Management Proposal Preparation (178)	4506
<i>Lauren Hale</i>	
Lean Construction Model Using Industrial Engineering Tools (127)	4520
<i>Diana Jaqueline Guerrero Galindo</i>	
The Cornerstone: Bringing Together IE, Lean, and Construction (236)	4528
<i>Ben Freidenberg</i>	
Managing in Tough Times (57)	4529
<i>Michele Dekelbaum, Gloria Bender, Garry Coleman, Michael Testani, Ryan Underdown</i>	
Are You Motivated? - Best Practice Models for Promoting High Performance (111)	4530
<i>Kevin McManus</i>	
The Quest for a Global Economic Ethic: If it's Not Ethical, It's Not Sustainable (11)	4547
<i>George Smith</i>	
An Approach for Selecting the Appropriate Problem Solving Methodology (134)	4559
<i>Sreekanth Ramakrishnan, Michael Testani</i>	
Managing Successful Integrated Enterprises: Lessons Learned from the U.S. Military Health System (195)	4571
<i>Wiljeana Glover</i>	
A Framework for Transitional Management (64)	4579
<i>Ahmed Elattar, Luis Rabelo</i>	
An Innovative Balanced Scorecard To Effectively Manage Product Quality of Newly Commercialized Technologies (200)	4592
<i>Zella Jackson Hannum</i>	

Managing Advanced Analytics (201)	4602
<i>Jack Levis</i>	
Applying Industrial Engineering Principles in Human Resources (125)	4638
<i>Christopher Maloney, Nina Miville, Shihab Asfour</i>	
Process Owner Responsibility and Accountability in a Senior Management Review (43)	4645
<i>Kirk Knock</i>	
Guerrilla Transformation - Change an Insurgency Into a Movement (10)	4655
<i>Joseph Paris</i>	
Proactive Management with Real Time Forecasting and Dynamic Simulation (116)	4666
<i>Hosni Adra</i>	
Elevator Bottlenecks in Hospital Design (106)	4674
<i>Thomas Brady</i>	
Qualitative Risk Assessment with FMEA (Failure Mode and Effect Analysis) (40)	4682
<i>Sigurdur Sigurdsson</i>	
Productivity and Human Equilibrium Model for Logistics and Supply Chain Management (197)	4696
<i>Angel Nolasco, Pablo Nuño</i>	
What Students Need to Be Successful in EM: For Students, By Students and Experts (SEMS Initiative) (161)	4727
<i>Arsalan Safari</i>	
Quality Decisions Come From Quality Data (12)	4733
<i>Brandon Theiss</i>	
Distribution Center Ergonomics: Developing Interventions to Prevent Back Injuries (47)	4745
<i>Steven Lavender, Carolyn Sommerich</i>	
The Ergonomic Benefits of Utilizing Short Interval Scheduling in Construction (138)	4746
<i>Jan Evans</i>	
IE Evolution and Frontiers (219)	4767
<i>Steven Duket</i>	
IE Frontiers: Research Needs for HealthCare (220)	4782
<i>Ken Musselman</i>	
Panel on IE Frontiers: What Research Is Needed (221)	4790
<i>Steven Duket, Arnold Barlow, Kazuo Takeda, Pamela McCauley Bush, Kenneth Musselman</i>	
Quality Engineering Joins Clinical Caregivers to Improve Early Sepsis Recognition (27)	4791
<i>Valentine Boving</i>	
Visual Management: Medical Supplies Management on Nursing Units (51)	4809
<i>Joshua Bosire, Tejas Gandhi</i>	
Polarity Thinking: Seeing, Mapping and Tapping 'Unsolvable Problems' in Healthcare (119)	4821
<i>Laurie Levknecht</i>	
Geisinger Medical Center - Understanding How Clinicians Spend Their Time and Ideas for Improvements (117)	4846
<i>Seth Hostetler, Michele Stuart</i>	
Improving Ambulatory Surgery Performance at a VA Medical Center (78)	4862
<i>Jose Sepulveda, Waldemar Karwowski, Serge Sala-Diakanda, William Thompson</i>	
Industrial and Systems Engineering Centers in the Veterans Health Administration (173)	4863
<i>James Benneyan, Ashley Benedict, Christopher Masek, Robert Monte, Heather Woodward-Hagg</i>	
Lean Module for Residents - Engineers Role in Teaching Doctor (158)	4864
<i>Ashley Benedict</i>	
Best Practices in Labor Management (19)	4876
<i>Kerry Coran, Gary Altman</i>	
Performing a Labor Opportunity Assessment Utilizing Comparative Data (193)	4886
<i>Yvette Leger</i>	
Improving the Reliability of Health Care through the Application of Human Factors Engineering (26)	4916
<i>Brian Fillipo</i>	
Managing Professional Transitions as Part of Organization Change (55)	4937
<i>Jean Ann Larson</i>	
Care Coordination and Hospital System Readmissions (42)	4951
<i>Ken Musselman, Cody Mullen, Zhiyi Tian</i>	
Industrial Engineering in the 'Talent Age' (44)	4962
<i>Brad Parrish</i>	
Coaching & Advising the Next Generation of IE Leaders: A Panel Discussion - 7:00 AM Start (31)	4979
<i>Majid Abab, Kaz Takeda</i>	
IE Opportunities and Challenges (79)	4981
<i>Dennis Oates, Kazuo Takeda, Kim Lascola Needy, Dave McIntyre</i>	
Managing Your IE Future - Strategies for Success (99)	4982
<i>Kevin McManus</i>	
What Leaders Look for in Promoting IE's into Management (29)	5007
<i>Kazuo Takeda, Donna Servais, Doug Rabeneck, Hans Demmel, Roman Hlutkowsky, Mark Todd</i>	
Town Hall Meeting - For the Industry Advisory Board (IAB) (39)	5014
<i>Bill Tolo, Kazuo Takeda, Majid Abab</i>	
Modelo Sistémico de Gestión de la Innovación Para Organizaciones, Clusteres y Territorios (53)	5015
<i>Jose Ramiro Bertieri Quintero, Fabiola Saenz Blanco, Joan Manuel Villamarin Marentes</i>	
Relaciones Entre La Formación Profesional Y La Creación De Empresas De Base Tecnológica (54)	5030
<i>Susana Del Pilar Sandoval Cantor, Jose Ramiro Bertieri Quintero</i>	

Modelo De Consultoría Y Capacitación Para Empresas Emergentes: Caso Del Estado De Nuevo León, México (163)	5036
<i>Fernando Mata, Lucinda Suárez, Antonio J. Dieck Assad</i>	
Improving Customer Service Processes in a Telecommunications Company (230)	5040
<i>Felipe Andres Enriquez Perez, Lindsay Alvarez Pomar</i>	
Simulación Estratégica de Inventarios y Distribución para Empresa Farmacéutica Mexicana (3)	5050
<i>Homero H. Contreras Pulido, Jose Pablo Nuño de la Parra</i>	
Lessons Learned from a Kaizen Events in a Drug Store Chain (187)	5059
<i>Juan Rojas, Veronica Gomez</i>	
Reducir el Costo de Distribución de Una Empresa de Transporte (93)	5071
<i>Leopoldo De Jesus Delgado Garza, Leticia Montserrat Cortez Guajardo, Ana Cristina Rivera Madrigal</i>	
Critical Factors that Impact Profitability in Cotija Cheese Supply Chain (94)	5072
<i>Aguilar Jaime, Martinez Jose Luis</i>	
The Foundation and Weakest Link of Lean Is Standard Work (190)	5073
<i>Martin Nazareth</i>	
Gaining Acceptance of Lean Improvement Ideas (160)	5074
<i>Michael Testani, Sreekanth Ramakrishnan</i>	
Using Lean to Revolutionize Support Service Processes (24)	5075
<i>Scott Smith</i>	
Inventory Management of Raw Material Using Lean Manufacturing Techniques (60)	5092
<i>Adan Valles, Jaime Sanchez, Deisi Gaytan</i>	
Electronic Health Record Preparation Using Design for Lean Six Sigma (102)	5093
<i>Jonathan Flanders</i>	
VSM 2.0 - A 'Next Level' Value Stream Mapping Case Study (109)	5094
<i>Kevin McManus</i>	
Industrial Engineering Led Operational Excellence Drives Significant Sustainable Results (189)	5111
<i>Martin Nazareth</i>	
Construct A Lean Competitive Automotive Component Manufacturing System (17)	5112
<i>Wenwei Song, Tao Wu</i>	
Why a Mix of Industrial Engineers and Operations People are Required for Effective Application of Operational Excellence Tools (149)	5132
<i>Martin Nazareth</i>	
Successful Lean-Six Sigma In Healthcare - A Case Study (107)	5133
<i>Ron Phipps</i>	
Strategic Planning - Using Lean Principles in the Planning Process (171)	5164
<i>Greg Lashley, Shellie Godi</i>	
Eight Steps to Achieving Operational Excellence (20)	5174
<i>Kevin Duggan</i>	
Customer Care Call Center Property Managers Program Process Improvement Study (81)	5175
<i>Maya White</i>	
Using Asset Utilization Metrics to Identify Improvement Opportunities (170)	5191
<i>Kenneth Gram</i>	
Multi-Criteria Dispatching Rule For A Combined Make-To-Stock/Make-To-Order Environment (121)	5203
<i>Pamela Escobar, Diana María Cárdenas, Jaime Alberto Giraldo</i>	
Implementation of a Restaurant Revenue Management System at The Walt Disney World Parks & Resorts (211)	5228
<i>Haining Yu</i>	
Optimization of Fab Capacity in a Semiconductor Manufacturing Company (83)	5229
<i>Pradeep Ramachandran, Naveen Divakaran, John Bean</i>	
Optimization of Distribution of Pharmaceuticals through the Ant Colony Model (212)	5245
<i>Beltran Garzon Oscar Fernando, Pena Murcia Freddy Hernan, Ever Angel Fuentes Rojas</i>	
Using Optimization to Launch Disney's Newest Cruise Ships (85)	5253
<i>Whitney Conner</i>	

VOLUME 7

Managing the Highly Variable Demand of Highly Demanding Customers with Analytics (172)	5268
<i>Casey O'Donnell, Markus Emsermann</i>	
Town Hall Meeting and Panel Discussion - What are the Challenges IEs Face in Process Plants? (216)	5277
<i>Luis Armendariz</i>	
Extending Lean in Process Industry Supply Chains (215)	5278
<i>Dirk Van Goubergen</i>	
Lean Manufacturing Techniques Applied to Product Packaging (18)	5289
<i>Peter King</i>	
RFID: Basic Application and Benefits in the Process Industry (214)	5320
<i>Joseph Paris</i>	
7 Secrets of Incident Investigation and Root Cause Analysis (217)	5334
<i>Mark Paradies</i>	
Lean Solutions for Small and Medium Food Processers: Results from Multiple Case Studies (218)	5349
<i>Manoj Dora, Xavier Gellynck</i>	

Sawmill Manufacturing Planning, Scheduling and Control: Moving Towards Lean (169)	5364
<i>Eldon Gunn, Corinne Macdonald</i>	
Kaizen Events - Benefits to be had in the Glass / Ceramic and Process Industry (233)	5378
<i>Vincent Howell</i>	
The Integration of Business Process at the Manufacturing Enviroment (73)	5379
<i>Alexandre A. Boschi, Rogerio Borin, Julio Cesar Raymundo, Mario Mollo, Antonio Batocchio</i>	
Bayesian Modeling Approach for Predicting Residual Life of Two-Phase Degradation (225)	5391
<i>Suk Joo Bae, Tao Yuan, Shuluo Ning, Way Kuo</i>	
Statistical Thinking for Six Sigma Black Belts - A Test (2)	5402
<i>Kalikathan Krishnamoorthi</i>	
The Future of Design of Experiments: Is it Optimal? (52)	5423
<i>Daniel Griffith, Eduardo Santiago</i>	
The Process of Internal Audits as a Catalyst for Continuous Improvement (96)	5442
<i>Ryan Underdown, Gary Yentzen</i>	
FEATURED SPEAKER - Evidence Based Asset Management (22)	5447
<i>Andrew Jardine</i>	
Strategic Simulation Applied to a Distribution Network in Mexico. (37)	5467
<i>Homero H. Contreras Pulido, Jose Pablo Nuño de la Parra</i>	
Assembly Line Balancing Using Probabilistic Task Times (166)	5476
<i>David Sly</i>	
I Can See Clearly Now That the Rain Has Gone: the Benefits of Discrete Event Simulation in the Manufacturing Arena of Salt Lake City. (68)	5477
<i>Jason Smith</i>	
Resource Planning through Manufacturing Simulation (123)	5485
<i>Ramez Tadros, Patricia Buchanan</i>	
Real Time Hospital Bed Allocation Optimization Using Dynamic Simulation (112)	5503
<i>Hosni Adra</i>	
Improving Surgical Pathology Turnaround Time Using Simulation (128)	5514
<i>Du Meyer, Acelyn Barlaan</i>	
Peril's of Building a Discrete Simulation Model (151)	5526
<i>Don Hart, Travis Hill, Chase Saunders, Robbie Holt</i>	
Terminals Flow Estimation through Analytical and Simulation Approach (100)	5538
<i>Giacomini Cristian</i>	
Simulation of a Great Lakes Truck Ferry Operation (105)	5547
<i>Thomas Brady</i>	
Simulation, Forecasting, and Staffing Models for Patient Call Centers (120)	5559
<i>Christopher Masek</i>	
Risk-based Planning and Scheduling through Simulation (186)	5579
<i>Martin Franklin</i>	
Business Process Modeling and Simulation in Service Industries; Practical Approach and Best Practices (133)	5583
<i>Arsalan Safari</i>	
Computer Simulation in Foodservice (45)	5602
<i>Juan Martinez, Ignacio Goris</i>	
Simulating a Truck Fleet to Transport Fuel (75)	5617
<i>Fernando Ibarra</i>	
Comparative Analysis of Layouts of a Fruits and Vegetables Wholesale Market Hall by Simulation (145)	5628
<i>Emre Cakmak, Mehmet Tanyas, Pinar Irlayici Cakmak</i>	
Sustainable Logistics: What Does it look like and How Does it Benefit your Company? (198)	5629
<i>Diana Berry, Arnold Barlow</i>	
Supply Chain Sustainability: Green Logistics Best Practices and Case Studies - A Practioner's Experiences (104)	5648
<i>Rajiv Saxena</i>	
Practical Sustainability: Developing Sustainability from the Ground Up (146)	5649
<i>Theresa Barker</i>	
Zero Waste at The Ohio State University and Learnings from the IIE Great Lakes Regional Conference (69)	5655
<i>Katherine Fisher</i>	
A Human Centric Approach to Sustainability in High Consequence Disaster Management (224)	5676
<i>Pamela McCauley Bush</i>	
Management of a Social Project Using Balance Score Card (203)	5677
<i>Juan Pablo Quijano, Maria Catalina Ramirez</i>	
Sustainability Town Hall Meeting (209)	5689
<i>John Corliss</i>	
The Transportation Diet (115)	5690
<i>Gary Whicker, Robert Logan</i>	
Making a Business Case for Sustainability: A Panel Discussion (147)	5700
<i>Theresa Barker, Kevin McManus, John Corliss</i>	
Hot topics for Sustainability in the IIE Agenda: An Exploratory Workshop (162)	5702
<i>Eliseo Vilalta-Perdomo, John Corliss</i>	
Crossroads of Health Care Systems and Sustainability (71)	5715
<i>Katherine Fisher</i>	

Diagnostic and Study of the Creation of a Regional Rural Water Supply (202)	5731
<i>Lina María Bernal, María Catalina Ramírez</i>	
Security Maturity Model for International Logistics (184)	5749
<i>James Barnard, Joseph Garmon</i>	
My 50 years in Academia (206)	N/A
<i>J. T. Black</i>	
LSC Division Town Hall Meeting (205)	5750
<i>Md Sarder</i>	
Introduction of a Service Industry Supply Chain (S2COR) (183)	5751
<i>James Barnard, Joseph Garmon</i>	
Creating Demand-Driven Supply Chains with Lean Concepts and Tools (188)	5752
<i>Theodore Brown</i>	
Supply Chain Risk Analysis in the Defense Sector (33)	5771
<i>Gerry Graves, Brench Boden</i>	
Knowledge Management Applying Information Technology in Logistic Activities (48)	5802
<i>Rogeiro Borin, Alexandre Boschi, Renato Marcio Santos, Ivanir Costa, Antonio Batocchio</i>	
The Competitive Advantage for the Companies that Use Electronic Invoice and RFID - An Analyse Using BizAgi BPMN (49)	5810
<i>Rogeiro Borin, Alexandre Boschi, Julio Cesar Raymundo, Ivanir Costa, Antonio Batocchio</i>	
The Trade Off of the Stock Strategy: Centralization or Decentralization. A Case Study of the Consumer Goods Company (74)	5820
<i>Alexandre A. Boschi, Rogerio Borin, Renato Marcio Santos, Mario Mollo, Antonio Batocchio</i>	
Establishing Interoperability between Multiple Modeling Software Applications (13)	5832
<i>Bryan Bergsma, Young-Jun Son, Ryan Bloomfield</i>	
Education for Systems of Systems Engineering (143)	5847
<i>Joseph Bradley, Kevin Adams</i>	
Transformation Case in a Small Enterprise (38)	5856
<i>Dhirendra Kumar, Sriram Menon, Siddhartha Rachakonda</i>	
Optimization of Robotic Force Control Assembly System (124)	5872
<i>Biao Zhang, David Gravel, Arnold Bell, George Zhang</i>	
A Methodology for SoSE Analysis (142)	5879
<i>Kevin Adams, Joseph Bradley</i>	
Case Study of Enterprise Excellence through Growth Strategy (41)	5886
<i>Dhirendra Kumar</i>	
Work Systems and Work Measurement Town Hall Meeting (152)	5903
<i>George Bishop</i>	
Unlocking the Power of Discrete Labor Measurement Systems (168)	5904
<i>Jeremy Tancredi, Brian Pacula</i>	
Teaching Work Measurement in the Industrial Classroom: 21st Century Issues? (204)	5911
<i>Gregory Brown</i>	
Aplicaciones de Ruteo Esbelto	5912
<i>Bernardo Villarreal</i>	
A Novel Low Cost Web Based Labor Scheduling System for Retail Operations	5924
<i>Ignacio Goris, Juan Martinez</i>	
Modeling the Help Desk Staffing Levels of an Information Technology Enterprise System	5941
<i>N/A</i>	
Development and Implementation of Standard Process for Manufacturing Scrap Reduction	5945
<i>Hafiz Eisa</i>	
Including Sustainability in Lean/Six Sigma Programs	5969
<i>Jan M. Evans</i>	
Caso De Exito En Un Centro De Investigacion En Mexico	5985
<i>Fernando Mata Carrasco, Antonio Dieck Assad, Lucinda Suarez Sandoval</i>	
Reflections on Continuous Facility Location with Unknown Number of Facilities	5997
<i>Hector J. Carlo, Francisco Aldarondo, Silmarie N. Torres, Priscilla M. Saavedra</i>	
Eight Steps to Achieving Operational Excellence	6005
<i>Kevin J. Duggan</i>	
A Nested Extreme Response Surface Approach for Reliability Based Product Design	6029
<i>Zequn Wang, Pingfeng Wang, Krishna Krishnan</i>	
Author Index	