



12:00 noon – 1:00 pm Lunch

SESSION 13

Friday, August 8, 1:30 pm - 2:45 pm
Competing Risk Availability & Optimization
Chair: Panlop Zeephongsekul (RMIT University, Australia)

Availability Optimization of Systems Subject to Competing Risk
E. A. Elsayed (Rutgers University, USA)
Y. Zhu (Rutgers University, USA)
L. Y. Chan (University of Hong Kong, Hong Kong)

Two Generalized Competing Risks Models for Maintenance Analysis
Y. Dijoux (Grenoble University, France)
O. Gaudoin (Grenoble University, France)

Relative Uncertainty of Availability and Failure Frequency for a Few Large, Recursive Networks
Christian Tanguy (Orange Labs (CORE/MCN/OTT), France)

SESSION 14

Friday, August 8, 1:30 pm - 2:45 pm
Quality Planning and Measurements
Chair: Yi-Kuei Lin (National Taiwan Univ. of Science and Technology, Taiwan)

A Study of the Inventory Models for Perishable Products in Aerospace Industry
Pao-Long Chang (Feng Chia University, Taiwan)
Ying-Chyi Chou (Tunghai University, Taiwan)

Productivity Changes for Human Resources in Science and Technology
Ying-Chyi Chou (Tunghai University, Taiwan)
Pao-Long Chang (Feng Chia University, Taiwan)

The Creeping Deteriorate Approach of TQM Efforts
Cheng-Kang Yuan (Lunghwa University of Science & Technology, Taiwan)

2:45 pm – 3:15 pm Break

SESSION 15

Friday, August 8, 3:15 pm - 4:45 pm
Transportation Data Analysis
Chair: Mohammed Hadi (Florida International University, USA)

M5P Tree Algorithm for Predicting Lane Clearance Time of Freeway Incidents
Chengjun Zhan (Florida International University, USA)
Albert Gan (Florida International University, USA)
Mohammed Hadi (Florida International University, USA)

Evaluation of Emergency Evacuation Methodologies for an Urban Area by Using Advanced Microscopic Simulator
Scott Parr (Florida Atlantic University, USA)

Demetris Pentaras (Florida Atlantic University, USA)
Evangelos I. Kaisar (Florida Atlantic University, USA)

Delineating Travel Lanes from Satellite Images for Disaster Relief Applications
Hongbo Chi (Florida International University, USA)
Fang Zhao (Florida International University, USA)
Hui Zhao (McMahon Associate, Inc., USA)
David L. Shen (Florida International University, USA)

Combining Service Patrol and Crash Data for Use in Highway Safety and Operational Analyses
Fang Mei (RS&H Associates, Inc., USA)
Sheng Yang (Marline Engineer, USA)
Mohammed Hadi (Florida International University, USA)

SESSION 16

Friday, August 8, 3:15 pm - 4:45 pm
Process Capability, Bootstrap & Optimization
Chair: Yi-Kuei Lin (National Taiwan Univ. of Science and Technology, Taiwan)

Bootstrap Sequential Fixed-Width Confidence Interval Estimation of Process Capability Index CPM
L. Sandamali Dharmasena (RMIT University, Australia)
P. Zeephongsekul (RMIT University, Australia)

Multi-Process Capability Analysis Chart under Non-normality Using CkSD Bootstrap Lower Confidence Limit
Sung Youb Choo (Changwon National University, Korea)
Sang Boo Kim (Changwon National University, Korea)
Jong Kun Kim (Changwon National University, Korea)
Ping Ping Zhai (Changwon National University, Korea)

Economic Specification Limits based on Single Sampling Rectifying Inspection Plan
Chung-Ho Chen (Southern Taiwan University, Taiwan)

Reliability of Motorcycle Components using Systemability Approach
D. Battini (University of Padova, Italy)
M. Faccio (University of Padova, Italy)
A. Persona (University of Padova, Italy)
F. Sgarbossa (University of Padova, Italy)

Saturday, August 9, 2008

8:15 am Registration/Continental Breakfast

SESSION 17

Saturday, August 9, 8:30 am - 9:45 am
Statistical Methods and Their Applications in Engineering
Chair: Zhenmin Chen (Florida International University, USA)

A Time-Dependent Stress-Strength Interference Model with Strength Degradation following a Gamma Process
Zongwen An (Univ. of Electronic Science and Technology of China, China)
Hongzhong Huang (Univ. of Electronic Science and Technology of China, China)
Zhonglai Wang (Univ. of Electronic Science and Technology of China, China)

Sensitivity Analysis on the Reliability of a Stochastic-Flow Network
Shin-Guang Chen (Tungnan University, Taiwan)
Yi-Kuei Lin (National Taiwan Univ. of Science and Technology, Taiwan)

Analyzing Data Sets from Lognormal Distribution when Undetected Observations Present
Zhenmin Chen (Florida International University, USA)

SESSION 18

Saturday, August 9, 8:30 am - 9:45 am
Reliability in Design: Case Studies
Chair: Giulio Fanti (Università di Padova, Italy)

Hybrid MCDM Analysis of Flexibility Manufacturing Competence and Managerial Performance: A Case Study
Ming-Lang Tseng (Ming-Dao University, Taiwan)
Chi-Horng Liao (Ta-Hwa Institute of Technology, Taiwan)

Yuan-Hsu Lin (Ming-Dao University, Taiwan) Novel Design of Tunnel Type Biodigesters
Chandra Wahyu Purnomo (Gadjah Mada University, Indonesia)
Ambar Pertiwiningrum (Gadjah Mada University, Indonesia)

Design and MTF Verification of an Improved Tripod for Image Acquisition
Giulio Fanti (Università di Padova, Italy)
Roberto Basso (Università di Padova, Italy)

9:45 am - 10:00 am Break

SESSION 19

Saturday, August 9, 10:00 am - 11:30 am
Maintenance Modeling and Optimization
Chair: Toshio Nakagawa (Aichi Institute of Technology, Japan)

On an Optimal Maintenance Policy for a Markovian Deteriorating System with Incomplete Information and Uncertain Repair
Nobuyuki Tamura (National Defense Academy, Japan)
Management Policy for Prepayment Risk of a Monetary Facility
Syouji Nakamura (Kinjo Gakuin University, Japan)
Sayori Maeji (Kinjo Gakuin University, Japan)
Toshio Nakagawa (Aichi Institute of Technology, Japan)
Keiko Nakayama (Chukyo University, Japan)

An Imperfect Inspection Problem with an Inspection Threshold
Takashi Satow (Tottori University, Japan)
Hajime Kawai (Tottori University, Japan)

Simple Replacement and Entropy Models
Toshio Nakagawa (Aichi Institute of Technology, Japan)
Syouji Nakamura (Kinjo Gakuin University, Japan)
Sayori Maeji (Kinjo Gakuin University, Japan)

SESSION 20

Saturday, August 9, 10:00 am - 11:30 am
System Reliability Modeling
Chair: Hoang Pham (Rutgers University, USA)

New Algorithm for the Failure Probability of Strict Circular Consecutive-k-out-of-n:F System
Yoichi Higashiyama (Ehime University, Japan)
Ventsi Rumchev (Cutin Univeity of Technlogy, Australia)

Design Optimization of a Shock Absorber based on Numerical Simulation
Roberto Basso (Università di Padova, Italy)
Giulio Fanti (Università di Padova, Italy)

Composite Reliability Models for Systems with Two Distinct Kinds of Stochastic Dependences between their Components' Life Times
Jerzy Filus (Oakton Community College, USA)
Lidia Filus (Northeastern Illinois University Chicago, USA)

Predicting Software Reliability Growth Using Nonparametric Regression
Panlop Zeephongsekul (RMIT University, Australia)
L. Sandamali Dharmasena (RMIT University, Australia)

12:15 pm Adjourn!

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Shigeru Yamada (Tottori University)

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on

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