

EAWIE 2015 PROGRAM

Location: Business Building (Recently Constructed)

November 6(Friday)

9:30-10:00: Opening Ceremony (Room: B227)

1. Welcome message: Won Young Yun (Workshop co-chair)
2. Congratulatory message: Young Hoon Lee (President of KIIE)
3. Introduction of workshop: Ilkyeong Moon (Workshop co-chair)

10:00-12:00 Session EA-1: Various Topics in Industrial Engineering (Chair: Yasutaka Kainuma, Room: 405)

1. Ki Ho Chung, Seungyeon Ko, Chulung Lee, Heejin Lee, and Chang Seong Ko, Sustainable Collaboration Model with Monopoly of Service Centres in Express Delivery Services Based on Shapley Value Allocation
2. Vincent F. Yu, Yu-Chung Tsao, and Renan Maglasang, Simulated Annealing Hyperheuristic Framework for the Retail Shelf-Space Allocation Problem with Non-linear Profit Function
3. Yoonjea Jeong, Subrata Saha, and Ilkyeong Moon, Fuzzy Multi-Objective Model for Transportation Problem under Carbon Emission Consideration
4. Young Jin Han and Won Young Yun, RAM Design Optimization for a Multi-unit System Using a Genetic Algorithm
5. Yoshihiko Sasaki and Yasutaka Kainuma, Development of hybrid manufacturing /remanufacturing system

10:00-12:00 Session EA-2: Keynote Speech and Statistical Reliability (Chair: Mitsuhiro Kimura and W.Y. Yun, Room: B227)

1. Keynote Speech: Fumio Ohi, From Binary State to Multi-State Systems in Reliability Theory
2. Chanseok Park, Parameter Estimation of the Three-Parameter Weibull Model Using the Sample Correlation Coefficient from the Weibull Plot
3. Mitsuhiro Imaizumi and Mitsutaka Kimura, Reliability consideration of a control system connected with the network
4. Tejin Lim, Risk Analysis of Typhoon Disaster in Korea using Extreme Value Distribution

13:00-18:00: Industry Tour: LG Display

18:30-: Welcome Reception: 'Special One' Buffet, BENIKEA PREMIER MARIGOLD HOTEL

November 7(Saturday)

9:30-10:50 Session EB-1: Healthcare System (Chair: Eun Suk Suh, Room: 104)

1. Shiann Ming Wu, Dongqiang Guo, Wen Tsan Lin, Meng Hua Li, and Chih Long Lin, A Study of Consumers' Purchase Intention on Biotech Health Product
2. Hsien-Ming Shih, Feng Lin, Wen-Tsann Lin, and Meng-Hua Li, The Effects of Consumers's Perceived Value and Satisfaction on the Purchase Behavior Towards Biotechnology Health Products
3. Masato Takanokura, Masafumi Miyake, Masaru Kawakami, Seiko Taki, Tetsuo Yamada, and Munenori Kakehi, Quantification of Healthcare Works by Physical Activity at a Nursing Home for Long-term Care
4. Ying-Mei Lee, Zhang Xiangqian, Wen-Tsann Lin, Meng-Hua Li, and Hung-Lung Chang, Research on the Effect of Health food on Consumer Purchase Intention - a Case Study of Edible Algae

9:30-10:50 Session EB-2: Software Reliability (Chair: Mitsuhiro Kimura, Room: B223)

1. Shinji Inoue and Shigeru Yamada, Bootstrapping Interval Estimation for Software Reliability Assessment Based on an S-shaped Discretized Model
2. Mitsutaka Kimura, Mitsuhiro Imaizumi and Toshio Nakagawa, Optimal Number of Intelligent Nodes of Distributed Communication Processing for a Cloud System
3. Yoshinobu Tamura and Shigeru Yamada, Mobile Application for Reliability Assessment Based on Three Noisy Models for Cloud Computing
4. Mitsuhiro Kimura, One-step-ahead MTTF Prediction for Online Software Reliability Monitoring with Bootstrap Scheme

11:00-12:20 Session EC-1: Supply Chain Management (Chair: Biswajit Sarkar, Room: 104)

1. Mitali Sarkar, Young Hae Lee, and Biswajit Sarkar, Maximizing Profit of Supply Chain with Complementary Products using Game Theory
2. Changhyun Kim, Jae-Won Kim, and KwangSup Shin, Developing Fair Investment Plans to Enhance the Supply Chain Visibility based on RFID Tags using Cooperation Game
3. Hsin-Der Chen and Tsung-Sheng Chang, An $O(T \log T)$ Algorithm for the Single Item Uncapacitated Dynamic Lot-Sizing Model with Demand Time Windows
4. Kai-Ying Chen, Pei-Fang (Jennifer) Tsai, Mei-Lin Fan, Jui-Ting Shen, and Ming-Ren Chiou, An Innovated Business Model with Value-Added Service for the Logistics Industry in Taiwan – A Case Study

11:00-12:20 Session EC-2: Optimization in Maintenance-1 (Chair: Lu Jin, Room: B223)

1. Lu Jin, Optimal Inspection Policy for Scheduled Maintenance of Aging Systems
2. Mingchih Chen, XuFeng Zhao and Toshio Nakagawa, General Inspection Policies with Renewal Points
3. Qian Qian Zhao and Won Young Yun, Determining Inspection Intervals for One-shot Systems with Support Equipments
4. Kenichiro Naruse and Toshio Nakagawa, Optimal Checkpoint Times for a Computer System with Hardware and Software Failures

13:30-14:50 Session ED-1: Logistics (Chair: Ching-Jung Ting, Room: 104)

1. Prudensy Febreine Opit and Koichi Nakade, Pre-positioning of Emergency Relief Supplies under Facility Disruptions
2. Kun-Chih Wu and Ching-Jung Ting, A Constructive Heuristic for the Container Relocation Problem
3. Hak Bong Kim and Kap Hwan Kim, A Lagrangian Relaxation Method for Inter-Terminal Transshipment of Containers
4. Dong-jin Noh, Byung-In Kim, Hyunbo Cho, and Jun-Seo Park, An Algorithm for the High-speed Train Multi-leg Load Planning Problem

13:30-14:50 Session ED-2: Optimization in Maintenance-2 (Chair: Syouji Nakamura, Room: B223)

1. Tomohiro Kitagawa, Tetsushi Yuge, and Shigeru Yanagi, Maintenance Modelling for a System on Navy Ship
2. Syouji Nakamura, Xufeng Zhao, and Takayoshi Tamura, Backup Policies for a Database System with temporary large amount of update
3. Kodo Ito and Toshio Nakagawa, Commuter Airframe Maintenance Considering Replacement between Two Regions
4. Hyeon Ae Jang, Won Young Yun, and Hyuck Moo Kwon, Risk Evaluation Considering Common Cause Failures in FMEA

15:20-16:40 Session EE-1: Forecasting (Chair: Kazuhiro Takeyasu, Room: 104)

1. Kazuhiro Takeyasu, Hirotake Yamashita, and Daisuke Takeyasu, Improving Forecasting Accuracy for the Daily Sanitary Materials' Shipping Data With an Introduction of a Day of the Week Index
2. Daisuke Takeyasu, Asami Shitara, and Kazuhiro Takeyasu, Intermittent Demand Forecasting in the Case of Medical Apparatus By Improving Forecasting Accuracy
3. Daisuke Takeyasu and Kazuhiro Takeyasu, A Hybrid Method to Improve Forecasting Accuracy Utilizing Genetic Algorithm –An Application to the Data of Welfare Equipment –
4. Boa Nam, Jeonghwan Kim, Nahyeon Kim, and Soondo Hong, A Discrete Time Markov Chain model of two-worker blocking in a wide aisle circular-passage system and its simulation study

15:20-16:40 Session EE-2: Network Reliability (Chair: Xiao Xiao, Room: B223)

1. Gilseung Ahn and Sun Hur, Markov Network Model with Unreliable Edges
2. Xiao Xiao, Natsumi Takahashi, Daichi Enomoto, and Hisashi Yamamoto, Reconsideration of Network Types – The Case of $e=n+4$ -
3. Naoki Yoshida, Hisashi Yamamoto, Tomoaki Akiba, Koji Shingyochi and Xiao Xiao, Optimal Arrangement Problems for the Multi-State Consecutive-k-out-of-n:F System in Case of $\text{Max}\{k_j\}=2$ and k_j is Monotonous Increase and Decrease
4. Seong-joon Kim, Byeong Min Mun, and Suk Joo Bae, A simulation model for reliability prediction of progressive breakdown in ultra-thin gate oxides

16:50-18:20 Session EF-1: Production Control (Chair: Koichi Nakade, Room: 104)

1. Jaeryong Yeo and Young Jae Jang, Stochastic Energy Transfer Model for Wireless Charging Electric Vehicle and Experimental Validation
2. Young Jae Jang and Vina Sari Yosephine, Manufacturing Systems Education with LEGO MINDSTORMS
3. Koichi Nakade and Ken Ikeuchi, Optimal Ordering and Pricing on Clearance Goods
4. Sofyan Dwi Cahyo, Jeong Hwan Kim, Kap Hwan Kim, and Soondo Hong, Dispatching Rules and Dwelling Strategies for Overhead Shuttles in an Automated Container Terminal

16:50-18:20 Session EF-2: RAM Optimization (Chair: Kyungmee Kim, Room: B223)

1. Il Han Chung, Won Young Yun, and Jong Woon Kim, Redundancy Allocation in A Multi-Level Series System by Cuckoo Search
2. Eun Suk Suh, Improving Product Service System Availability through Field Repair Kit Optimization
3. Kyungmee Kim, Effects of Engine Clustering on Reliability
4. Hyunwoo Kim, Myoungho Shin, Sangyeon Cho, and Jeonghwan Ko, A Study on Reliability Calculation Method of Space Launch Vehicle Valves

18:30-: Conference Dinner: Baekyang-Nuri Grand Ballroom at the First Basement in Baekyang Road, Yonsei University