ISSAT International Conference on

MODELING OF COMPLEX SYSTEMS AND ENVIRONMENTS

JUNE 8 - 10, 2015 ● DANANG, VIETNAM

CONFERENCE PROGRAM

MONDAY, JUNE 8

8:30 am - 11:00 am   REGISTRATION

9:00 am - 9:15 am   WELCOME

Hoang Pham, Conference Chair (Rutgers University, USA)
Hung La, Program Chair (University of Nevada, Reno, USA)

9:15 am - 10:30 am SESSION 1:

Design and Modeling of Complex Systems

Chair: Prof. Yantao Shen (University of Nevada, Reno, USA)

A Collective Decision-Making System for Complex Crisis Event

Li Liu (Tsinghua University, China)
Gangqiao Wang (Tsinghua University, China)
Pan Yang (Tsinghua University, China)
Kai Yi (University of Electronic Science and Technology of China, China)
Hui Zhang (Tsinghua University, China)

A New Architecture for Reliable Computerized-Control System via IoT Enabled Connectivity

Tri Tran (Nanyang Technological University, Singapore)

Multi-striped PVDF Miniature Pressure Sensing System for Monitoring Embolized Brain Aneurysms: Design, Modeling, and Validation

Nithya Mohan (University of Nevada, Reno, USA)
Yudong Luo (University of Nevada, Reno, USA)
Yantao Shen (University of Nevada, Reno, USA)

10:30 am - 10:45 am   COFFEE BREAK

10:45 am - 12:00 pm   SESSION 2:

System Performance and Its Applications
Chair: Prof. Liyang Xie (Northeastern University, China)

Technique of Simultaneous Spectrophotometric Determination of Chromium (Vi) And Iron (Iii) Via Curve Fitting

Ekaterina V. Larionova (Tomsk Polytechnic University, Russia)
Anna N. Vtorushina (Tomsk Polytechnic University, Russia)
Evgeniya V. Zabolotskaya (Tomsk Polytechnic University, Russia)
Ksenia A. Bulygina (Tomsk Polytechnic University, Russia)

iChair: Intelligent Powerchair for Severely Disabled People
Jesse Leaman (University of Nevada, Reno, USA)
Hung Manh La (University of Nevada, Reno, USA)

System Reliability Modeling Method Based on Conditional Probability
Liyang Xie (Northeastern University, China)
Ningxiang Wu (Northeastern University, China)
Wenxue Qian (Northeastern University, China)

12:00 pm - 1:00 pm   LUNCH

1:15 pm - 2:45 pm SESSION 3:

Distributed Systems and Algorithms
Chair: Dr. Anthony Tran (Nanyang Technological University, Singapore)

Case Model Study Based on Multi-dimensional Scenario Space Method
Jing Qian (Tsinghua University, China)
Yi Liu (Tsinghua University, China)
Cheng Liu (Tsinghua University, China)
Yi Liu (People's Public Security University of China, China)
Hui Zhang (Tsinghua University, China)

On the Formation Control of a Multi-Vehicle System
Thang Nguyen (University of Exeter, United Kingdom)
Hung M. La (University of Nevada, Reno, USA)
Mohammad Jafari (University of Nevada, Reno, USA)

A Testing-Coverage Software Reliability Model and Model Comparisons
In Hong Chang (Chosun University, Korea)
Hoang Pham (Rutgers University, USA)
Seung Woo Lee (Chosun University, Korea)
Kwang Yoon Song (Chosun University, Korea)

A Distributed Power Hardware-In-the-Loop Microgrid Simulator with Reduced-Voltage Components
Tri Tran (Nanyang Technological University, Singapore)
Huy Nguyen (HCMC University of Technology, Vietnam)

2:45 pm - 3:00 pm COFFEE BREAK

3:00 pm - 4:30 pm SESSION 4:

Modeling of Complex Systems and Its Applications
Chair: Prof. Chi Tim Ng (Chonnam National Univeristy, Korea)

On the Performance of Phased-Mimo Radar with Beamforming
Van Tho Tran (Ho Chi Minh city University of Transport, Vietnam)
Canh Vinh Tran (Ho Chi Minh city University of Transport, Vietnam)
Cong Phuong Vo (Ho Chi Minh city University of Transport, Vietnam)

Situation Awareness and Emergency Response Using Cross-domain Data in Typhoon Haiyan
Qing Deng (Tsinghua University, China)
Xiaolong Deng (Beijing University of Posts and Telecommunications,)
Yi Liu (Tsinghua University, China)
Hui Zhang (Tsinghua University, China)

Modeling of Washing Circuits in Mining - A Networked System Approach
Tri Tran (Nanyang Technological University, Singapore)
Q. P. Ha (University of Technology, Sydney, Australia)

A Note on the Fast Maximum Likelihood Estimation Algorithm of Factor Analysis
Chi Tim Ng (Chonnam National University, Korea)
Myung Hwan Na (Chonnam National University, Korea)

5:00 pm - 8:00 pm   WELCOME RECEPTION

TUESDAY, JUNE 9

9:00 am - 10:15 am   SESSION 5:
Modeling of Complex Systems and Environments
Chair: Prof. Myung Hwan Na (Chonnam National Univeristy, Korea)

Characterization of Hip Implant Surfaces
Zhujian Feng (Texas A&M University, USA)
Trung Q. Le (Texas A&M University, USA)
Wayne Hung P. Nguyen (Texas A&M University, USA)

Physical Layer Secrecy Performance with Artificial Noise over Rayleigh/Rician Fading Channels
Tien Vu Truong (Duy Tan University, Vietnam)
Van-Thang Le (Duy Tan University, Vietnam)
Dac-Binh Ha (Duy Tan University, Vietnam)

Reliability Analysis of Tires Using Field Data
Myung Hwan Na (Chonnam University, Korea)
Chi Tim Ng (Chonnam University, Korea)
Ho-Chun Song (Chonnam University, Korea)
Eun Hee Hong (Seoul National University, Korea)

10:15 am - 10:30 am   COFFEE BREAK

10:30 am - 12:00 pm   SESSION 6:
System Modeling and Optimization
Chair: Prof. Hung La (University of Nevada, USA)

Stochastic Opinion Changing Model for Multiracial Society
Chang Phang (University Tun Hussein Onn Malaysia, Malaysia)
Hasna Heng Binti Kamal Koh (University Tun Hussein Onn Malaysia, Malaysia)

Numerical Algorithms for Quadratic Programming in Model Predictive Control - An Overview
Thuy V. Dang (Nanyang Technological University, Singapore)
Tri Tran (Nanyang Technological University, Singapore)
K-V. Ling (Nanyang Technological University, Singapore)

The Biological Sewage Disposal in Local Treatment Facilities of Objects of Individual Residential Buildings
A.Y. Basharova (Tomsk Polytechnic University, Russia)
A.N. Vtorushina (Tomsk Polytechnic University, Russia)
E.V. Larionova (Tomsk Polytechnic University, Russia)

Dynamic Human Gait Phase Detection Algorithm
Luan V. Nguyen (University of Nevada, USA)
Hung M. La (University of Nevada, USA)
Trung H. Duong (Rutgers University, USA)

12:00 pm - 1:00 pm   LUNCH

1:30 pm - 7:00 pm   CITY TOURS AND DINNER

WEDNESDAY, JUNE 10

9:30 am - 12:00 pm   INDUSTRY TOURS

12:00 pm - 1:15 pm   CLOSING LUNCH
                                      AWARD PRESENTATION

1:30 pm   ADJOURN