Asia Simulation Conference 2009
Advance Program

Wednesday, October 7

Room: Hall

10:00-10:50 Opening Ceremony

11:00-11:45 Keynote: Geant4 --- A Simulation Toolkit for Elementary Particles and Nuclei
   a. Geant4 - Overview and Its Applications
      Makoto Asai (SLAC National Accelerator Laboratory)
   b. Toward evidence based medicine: Simulation of Radiation Therapy
      Takashi Sasaki (KEK and SOKENDAI)

11:45-12:20 Keynote: The status quo and future of Industrial Process Simulation in China
   Qidi Wu (Tongji University)

12:20-12:55 Keynote: Simulation of Deformation in Robotics
   Shinichi Hirai (Ritsumeikan University)

13:00-14:00 Lunch Break

14:00-15:00 Organized Session 1: Monte Carlo Method for Particle Transport and Its Applications I
Session Chair: Makoto Asai (SLAC National Accelerator Laboratory)

145 Development of Educational Courseware using Geant4
   Koichi Murakami (KEK), Katsyua Amako (KEK), Hisaya Kurashige (Kobe U.),
   Akihiro Maki (KEK), Hajime Yoshida (Shikoku U.)

144 The Geant4-DNA project
   Sebastien Incerti (IN2P3/CENBG), Alfonso Mantero (IN2P3/CENBG)

134 Study and Simulation of the Calibration of the Drift Tubes for Muon Tracking in the Atlas Experiment at the LHC and Possible Use of Fast Gas Mixtures for SLHC
15:15-16:30 Organized Session 1: Monte Carlo Method for Particle Transport and Its Applications II

Session Chair: Makoto Asai (SLAC National Accelerator Laboratory)

54 A Volume Visualization Extension for Geant4-based Radiotherapy Simulation
Akinori Kimura (Ashikaga I.T.), Satoshi Tanaka (Ritsumeikan U.), Kyoko Hasegawa (Ritsumeikan U.), Ayumu Saitoh (Hyogo U.)

128 A Case Study of Design Scheme for Radiation Therapy Simulations Based on the Geant4 Toolkit: From a Simple Brachytherapy to a Proton Therapy
Jungwook SHIN (NCC), Sung Yong PARK (NCC), Dongho SHIN (NCC), Meonggeun YOON (NCC), Dongwook KIM (NCC), Yeongkyung LIM (NCC) Se Byeong LEE (NCC), Sanghoon LEE (NCC), Hojin JUNG (NCC)

111 Research and Clinical Implementation of Monte Carlo Simulation in CGU/CGMH
Tsi-chian Chao (CGU), Chung-Chi Lee (CGU), Chuan-Jong Tung (CGU), Shu-Ju Tu (CGU), Hui-Yu Tsai (CGU)

47 Improvements of Computational Efficiency on GEANT4 Based Proton Therapy Simulation
Tsukasa Aso (Toyama C.M.T.), Takashi Sasaki (KEK)

106 A Prototyping of Web Interface for Treatment Planning in Radiotherapy in the Multi Grid Infrastructure
Go Iwai (KEK), Yutaka Kawai (KEK), Takashi Sasaki (KEK), Yoshiyuki Watase (KEK)

Room: K309

14:00-15:00 Organized Session 10: Virtual Prototyping I
Session Chair: TBD

(4 papers)

15:15-16:30 Organized Session 10: Virtual Prototyping II
Session Chair: TBD
Room: K310

14:00-15:00 General Session 1: Parameter Estimation I
Session Chair: TBD

29 The Efficient Search Method for High Risk Events of Large-scale Power Systems
Tetsushi Miki (ANCT)

61 The Optimal Design of gas oven assembly line with the Simulation and Evolution Strategy
Kyungrok Kim (Korea University)

68 FIR Firearm Identification System
Pitak Thumwarin, Chawarit Prasit, Thienchai Suwanvesh (KMITL), Takenobu Matsuura (Tokai University)

69 Research on Situation Assessment for Automatic Flight Control System
Cao Lu, Zhang An (Northwestern Polytechnical University), Guo Feng-juan

15:15-16:15 General Session 2: parameter Estimation II
Session Chair: TBD

121 The Simulation for Conceptual Design Using the Particles Methodologies
Kento Yoshioka, Hiroshi HASEGAWA (Shibaura Institute of Technology)

122 A New Approach to Nonlinear Descriptor Systems with Variable Rank of Jacobians
Joe Imae (Osaka Prefecture University), Koichiro Yoshimura, Guisheng Zhai, Tomoaki Kobayashi

125 Episode Continuation and Exploration Start for Reinforcement Learning with Large Number of States
Boontee Kruatrachue, Ekaphol Anantapornkit (KMITL)

141 Error Analysis of Temperature Measurement—a case study of PT100
Tawatchai Seangratipen (KMITL)

Room: K304

14:00-15:00 General Session 3: Complex System
Session Chair: TBD

49 Risk-shifting Incentive Problem and Volatility
Hiroshi Inoue, Masatoshi Miyake (Tokyo University of Science)

101 Impacts of Protective Devices and Dynamic Voltage Restorer on Voltage Sag in Distribution Systems
Somporn Sirisumrannukul (KMUTNB), Tanit Meananeatra (MEA), Jutanon Kaewmanee (KMUTNB)

152 Simulation on Pneumatic Vacuum Circuit with Ejector
Zhonghua Guo (Tokyo Institute of Technology), Xiaoning Li (Nanjing University of Technology), Xin Li (Tokyo Institute of Technology), Kenji Kawashima (Tokyo Institute of Technology), Toshiharu Kagawa (Tokyo Institute of Technology)

162 Robustness Problems and Verified Computations for Computational Geometry
Junjun JIA (The University of Tokyo), Jin Zhu (WASEDA University), Shuichi IWATA

15:15-16:15 General Session 4: Control System
Session Chair: TBD

113 State Space for Control Systems Using Bond Graph Approach
Shervin Mansouri guilani (Science and research), Sajad Shamsipour (Science & Research University), Alireza Novinzadeh (K.N.Toosi University)

159 Accurate Steering Motor Control Method of Steer-by-wire System and the HILS Experiment
Kazumasa Hashimoto, Naoto Fukushima, Ichiro Hagiwara (Tokyo Institute of Technology)

91 Optimal H2 Controller Design with Derivative State Constraints for Torsional Vibration System
Sungwan Boksuwan (KMITL), Noriyuki Komine (Tokai University), Taworn Benjanarasuth (KMITL), Jongkol Ngamwiwit

67 Friction Estimation and Compensation for Rotational System using Unscented Kalman Filter
Boonsri Kaewkhamsai (Chiang Mai University), Kasemsak Uthaichana (Chiang Mai University)

Thursday, October 8

Room: Hall

11:40-12:15 Keynote: An Architecture of a Model-Management System
Axel Lehmann (Universitaet der Bundeswehr Muenchen)
12:15-12:50 Keynote: Virtual Laboratory as Effective E-Learning Teaching Aids in Control Systems
Marzuki Khalid (Universiti Teknologi Malaysia)

13:00-14:00 Lunch Break / Poster Session

14:00-15:30 Organized Session 6: Visualization/VR I
Session Chair: Taku Itoh (Seikei University)
38 Heat Transfer Analysis Using Modified Radial Point Interpolation Method
Kyoko Hasegawa, Susumu Nakata, Satoshi Tanaka (Ritsumeikan University)
45 A Visualization Tool for Meshfree Analysis of Three-Dimensional Solids
Ryohei Koga, Satoshi Tanaka, Susumu Nakata, Kyoko Hasegawa (Ritsumeikan University)
42 Data Interpolation Independent of Grid Structure Using a Volumic Version of MPU
Yuusuke Tsukamoto, Shinji Kataoka, Kyoko Hasegawa, Susumu Nakata, Satoshi Tanaka (Ritsumeikan University)
44 Monte Carlo Sampling with Adaptive Space Partitioning of MPU for Volume Visualization
Hideo Nakajima, Satoshi Tanaka, Susumu Nakata, Kyoko Hasegawa (Ritsumeikan University)
140 Visualization for Large-scale High Frequency Electromagnetic Field Analysis Using Hierarchical Domain-decomposition Data Structure
Amane Takei (The University of Tokyo)
58 Spread-Sheet-Based Automatic Construction of Urban Street Models from GIS data
Masakazu Sawai (Graduate School of Science and Engineering, Ritsumeikan University), Yuzuru Isoda (College of Asia Pacific Studies, Ritsumeikan Asia Pacific University), Akihiro Tsukamoto (JSPS Research Fellow, Ritsumeikan University), Yoshihiro Kosaka (NEC System Technologies, Ltd), Kyoko Hasegawa, Susumu Nakata, Satoshi Tanaka (Ritsumeikan University)

15:45-17:00 Organized Session 6: Visualization/VR II
Session Chair: Satoshi Tanaka (Ritsumeikan University)
92 A Streamline Visualization Technique for Sub-volume Based CFD Results
Takuma Kawamura, Naohisa Sakamoto, Koji Koyamada (Kyoto University)
102 A Study on the Effects of Highlighted Display on Knowledge Worker Productivity
Jinwu Seo (Seoul National University), Kyung Yong Yoo, Jinwoo Park
A Feedback Control Method for Dynamical Simulation Systems to Make 3DCG Animations of Continuum Shells

Ippei TAKAUCHI* (Kanagawa Institute of Technology), Masatoshi OCHIAI, Hiromu Saito (Kanagawa Institute of Technology), Ryo Asakura (Kanagawa Institute of Technology), Motofumi HATTORI (Kanagawa Institute of Technology)

Estimation of the Real Time Visualization System using Shared Space by 2D Viewer for Distributed Calculation

Osamu Ohta, Teruo Matsuzawa (Center for Information Science, Japan Advance Institute of Science and Technology)

Design of Scientific Concept Vocabulary for Annotation Method of Visualization System

Chiaki Kino, Yoshio Suzuki, Hiroshi Takemiya (Japan Atomic Energy Agency)

Room: K309

10:00-10:45 General Session 5: Simulation Platform

Session Chair: TBD

32 A Probabilistic and Commutative Re-Encryption Scheme
Shinsuke Tamura, Rokibul Alam, Hazim Haddad (University of Fukui)

60 Many-Particle Simulation for Ion-Ion Coulomb Interactions in the Trapped-Ion Cell of an FT-ICR Mass Spectrometer using a Special-Purpose Computer Board
Makoto Fujiwara (Hiroshima City University)

143 Computer Simulation Platform for Learning Constructional Approach through Sheep Dog Action Design
Toshiaki Yokoi (Tokyo City University)

13:00-14:00 Lunch Break / Poster Session

14:00-15:00 Organized Session 8: Dynamic analysis of discrete-time neural networks I

Session Chair: TBD

4 Some Results Concerning State Estimation of Discrete-Time Delayed Neural Networks
Xuyang Lou (Jiangnan University), Baotong Cui (Research Center of Control Science and Engineering)

10 Delay-dependent stability for uncertain stochastic recurrent neural networks with discrete and distributed delays
Li Sheng, Huizhong Yang (Jiangnan University)

12 Two-frequency-loop Optimal Control for Wind Energy Conversion System Based on

Session Chair: TBD

16 Modeling and Simulation of Large Scale Multi-Item Stochastic Inventory System
Yukun Liu (Beijing University of Posts and Telecommunications)

26 Global Exponential Stability in Lagrange Sense for Cohen-Grossberg Neural Networks with Time-varying Delays
Yan-yan Chen, Qi Luo (Nanjing University of Information Science and Technology)

40 Minimum Complex Network of Chaotic Robots
PITIKHATE SOORAKSA (KMITL)

66 Non-Symmetric Charge Sustaining Strategy for Supervisory Predictive Control of Batteries in Hybrid Electric Vehicles
Kasemsak Uthaichana (ChiangMai University)

Room: K310

10:00-11:00 General Session 6: Computational Engineering I

Session Chair: TBD

95 Temperature Dependence of Colloidal Aggregation: Cluster-Moving Monte Carlo Simulation
Junjun JIA (The University of Tokyo), Jin Zhu (WASEDA University), Shuichi IWATA

120 Temperature compensation in differential pressure method for air leakage detection
LAI LAI OO (Tokyo Institute of Technology), Chongho Youn (Tokyo Institute of Technology), Toshiharu Kagawa (Tokyo Institute of Technology)

127 Convergence Property of Underwater Aplanatic Acoustic Lens with Changing Water Temperature and F Number
Yuji Sato, Koichi Mizutani, Naoto Wakatsuki (University of Tsukuba), Toshiaki Nakamura (National defense Academy)

130 Study on Unsteady Temperature Change of the Circular Cylinder
Chongho Youn (Tokyo Institute of Technology), Xin Li, Toshiharu Kagawa (Tokyo Institute of Technology), LAI LAI OO (Tokyo Institute of Technology)
13:00-14:00 Lunch Break / Poster Session

14:00-15:00 General Session 7: Computational Engineering II
Session Chair: TBD
135  A Numerical Study on Vortex Cup
   Xin Li (Tokyo Institute of Technology)
148  Two-Dimensional Boundary Element Analysis of Slant Edge Cracked Rectangular Plate Using Near-Tip Solution
   Toshio Furukawa, Toshiyasu Suyoshi (University of the Ryukyus)
149  Analysis on Flow Rate Characteristics of Porous Materials
   WEI ZHONG (Tokyo Institute of Technology), Guoqiang TAO (ZheJiang University), Xin Li (Tokyo Institute of Technology), Kenji Kawashima, Toshiharu Kagawa (Tokyo Institute of Technology)
154  The Vibration Analyses of Truss core panel
   So Tanaka (Tokyo institute of Technology), Ichiro Hagiwara (Tokyo Institute of Technology), Hiroaki Morimura, Saito Kazuya

15:15-16:00 General Session 8: Computational Engineering III
Session Chair: TBD
155  Flooding Properties of Low-Lying Tokyo Area with Respect to Levee Breaching Phenomenon
   Sena Serhadlioglu (The University of Tokyo), Shintaro Bunya (MRI), Shinobu Yoshimura (The University of Tokyo)
163  Guaranteed error estimate for solutions to linear two-point boundary value problems with FEM
   Akitoshi Takayasu, Shin’ichi Oishi (Waseda University), Takayuki Kubo (University of Tsukuba)
96   Distributed Stochastic Finite Element on a Desktop Grid Integrated with Cloud
   Yohei Sato (The University of Tokyo), Hiroshi Okuda (The University of Tokyo)

Room: K304

10:00-10:45 General Session 9: Visual Simulation I
Session Chair: Mitsunori Makino (Chuo University)
7    Thermal Segmented-Based Face Identification System
   Khairul Hamimah Abas, Osamu Ono (Meiji University)
62   Influence of Principal Point on Camera Calibration Algorithms
   Kaset Sirisantisamrid (KMITL), Kittirat Tiraseth (KMITL), Takenobu Matsuura
A Method of Boundary Estimation from 3D Scattered Point Data without Normals by Implicit Function and Delaunay Tetrahedralization
Taku Itoh (Seikei Univ.)

13:00-14:00 Lunch Break / Poster Session

14:00-14:45 General Session 10: Visual Simulation II
Session Chair: TBD
115 A Recognition System for Stamped Number on Non-Smooth Metallic Surface
Taweepol Suesut (KMITL)
126 Implementation of a Human-Like Bot in a First-Person-Shooting Game
Ruck Thawonmas, Daichi Hirono (Ritsumeikan University)
156 Feature-preservation and Anti-shrinkage Smoothing of Point Sets
GANG TONG, Ichiro Hagiwara, Zhuoqi Wu (Tokyo Institute of Technology)

15:00-15:45 General Session 11: Visual Simulation III
Session Chair: TBD
157 Texture Replacement of Architecture in Single Image
Zheng GONG, Ichiro Hagiwara (Tokyo Institute of Technology)
158 Investigation of adaptive image paralleling segmentation algorithm
Peng Hao, Ichiro Hagiwara (Tokyo Institute of Technology)
161 Eigenvector based feature region partition algorithm for registration of measured point cloud
Li rong Wang, Jia cai Wang, Ichiro Hagiwara (Tokyo Institute of Technology)

Room: K305

10:00-10:45 General Session 19: Medical Application
Session Chair: Kazunori Nozaki (Osaka University)
110 SIGEN: System for Reconstructing Three-Dimensional Structure of Insect Neurons
Toshifumi Minamoto, Ayumu Saitoh (University of Hyogo), Hidetoshi Ikeno (University of Hyogo), Teijiro Isokawa, Naotake Kamiura, Nobuyuki Matsui, Ryohei Kanzaki (the University of Tokyo)
119 Combined Medical Imaging with CFD Analysis for Application of Diagnostic and Treatment Planning: The Case Study of Human Nasal Airflow Simulation Based on CT Imaging
Khaisang Hemtiwakorn, Niwat Phoocharoen (KMITL), Visan Mahasitthiwat
Analysis of the underlying mechanism of Frank-Starling Law of a Constructive Hemodynamics Model
Mitsuharu Mishima (Kyoto University), Takao Shimayoshi 0, Akira Amano 0, Tetsuya Matsuda 0

13:00-14:00 Lunch Break / Poster Session

14:00-14:45 General Session 20: Network Modeling
Session Chair: TBD
77 Wide-Band Slot Antenna Fed by Coplanar Waveguide for WLAN Applications
Weerathep Kueathawee, Noppin Anantrasirichai, Chawalit Benjangkaprasert (KMITL), Toshio Wakabayashi (Tokai University), Sutheera Puntheeranurak (KMITL)
87 MODIFICATIONS OF LOW-PASS FILTER RESPONSES BY THE GENERALIZED BESSEL TRANSFORMATIONS WITH EQUAL-RIPPLE ATTENUATION IN THE STOPBAND
Virote Pirajnanchai (RMUTT Faculty of Engineering)
98 Performance Comparison of AOMDV and AODV for Mobile Ad Hoc Networks
Paitoon Raklure (RMUTT)

Friday, October 9

Room: Hall

10:00-11:15 Organized Session 1: Brain Simulation I
Session Chair: Ikuko Nishikawa (Ritsumeikan University)
31 Estimation of Intracellular Calcium Ion Concentration by Nonlinear State Space Modeling
Takamasa Tsunoda 0, Toshiaki Omori 0, Hiroyoshi Miyakawa 0, Masato Okada 0, Toru Aonishi (Tokyo Institute of Technology)
28 Fusion of real neuron and mathematical model by using dynamic clamp technique
Toru Aonishi (Tokyo Institute of Technology), Takamasa Tsunoda 0, Keisuke Ota 0, Toshiaki Omori 0, Masato Okada 0, Hiroyoshi Miyakawa 0
90 Estimation of non-uniform membrane property over the dendrite: data assimilation approach using bioimaging data and multi-compartment model
A quantitative modeling of neural morphological polarization
Yuichi Sakumura (Nara Inst. of Sci. and Tech.)

Biophysical modeling of spike-timing-dependent plasticity
Hidetoshi Urakubo, Minoru Honda, Shinya Kuroda (University of Tokyo)

11:40-12:15 Keynote: Micro-Satellite "Maido-1 (SOHLA-1)”: Lessons Learned in Design, Development and Operation
Hiroshi Okubo (Osaka Prefecture University)

12:15-12:50 Keynote: The Next-Generation Supercomputer Project
Tadashi Watanabe (RIKEN)

13:00-14:00 Lunch Break

14:00-15:00 Organized Session 1: Brain Simulation II
Session Chair: Ryota Kobayashi (Ritsumeikan University)

41 Functional Changes Induced by Multiple Plasticity Rules in the Hippocampal Circuit: Simulation and Experiment
Siu Kang (RIKEN), Rie Kimura (BSI-TOYOTA), Norio Matsuki (Univ. Tokyo), Yuji Ikegaya (Univ. Tokyo), Tomoki Fukai (RIKEN)

71 Dopaminergic Modulation of Neural Activity in a Computational Model of Subthalamic Nucleus and Globus Pallidus Network
Katsunori Kitano, Noriaki Iida, Tomohiro Fujita (Ritsumeikan University), Tomoki Fukai (RIKEN)

84 A simulation of the dynamics of the premotor center in an insect brain to generate the programmed behavior for the pheromone orientation
Ikuko Nishikawa, Yoshiki Igarashi (Ritsumeikan University), Akira Takashima, Shigehiro Namiki, Tomoki Kazawa, Stephan Haupt (the University of Tokyo), Hidetoshi Ikeno, Ryohei Kanzaki (the University of Tokyo)

51 Simulation of a small neural network involved in pheromone orientation in male silkmoths
Akira Takashima, Shigehiro Namiki, Tomoki Kazawa, Stephan Haupt (the University of Tokyo), Ikuko Nishikawa (Ritsumeikan University), Hidetoshi Ikeno (University of Hyogo), Ryohei Kanzaki (the University of Tokyo)

16:00-17:00 Closing Ceremony
Room: K309

10:00-11:30 General Session 12: Engineering Application I
Session Chair: Yoshio Suzuki (JAEA)

6 An Equipment Damaged Grades Assessment Model
Zongchang Xu, Yuefeng Chen (Engineering Institute of Armored forces), Haitao Li, Hongguo Guo, Yang Xiu (Engineering Institute of Armored forces)

30 Two-Degree-of-Freedom Simple Servo Adaptive Control for Two-Inertia System
Taworn Benjanarasuth (KMITL)

46 Use of Thermodynamic Simulation for Construction of Fluoride Volatility Process as Advanced Reprocessing
Ippei Amamoto (Japan Atomic Energy Agency), Takayuki Terai (The University of Tokyo)

48 Modeling and Performance Simulation for Picking Banana Manipulator Based on Modelica
Wang Hongjun (South China Agricultural Unive)

104 Frequency Characteristics of Duct with Long Sphere Cavity
Kazuhide Okada (Toyota Motor Corporation)

105 One study of Hardware Modification for Legibility Improvement
Kazuhide Okada (Toyota Motor Corporation)

13:00-14:00 Lunch Break

14:00-14:45 General Session 13: Engineering Application II
Session Chair: TBD

53 3 Dimensional Implementation of BFA (Backtrack Free path planning Algorithm) for Manipulators
Tomanari Murata, Shinsuke Tamura, Masayuki Kawai (University of Fukui)

109 AN EFFECTIVE AND SAFE CHARGING ALGORITHM FOR LEAD-ACID BATTERIES IN PV SYSTEMS
Abd El-Shafy Nafeh (Electronics Research Institute)

137 The Simulation of Tiptoe Mechanism for Biped Robots
Masayuki Saiki (Shibaura-IT), Naoya Ito

15:00-15:45 General Session 14: Engineering Application III
Session Chair: TBD

142 Design of Piezoelectric Sensor with Multimode for Liquid Properties
Jun Takarada, Naoto Wakatsuki, Koichi Mizutani (University of Tsukuba)

Magnetic-Structural Coupled Analysis of MRI Model with Hierarchical Domain Decomposition Method
Victor Magron, Yushi Mukaida, Shin-Ichiro Sugimoto, Shinobu Yoshimura (The University of Tokyo)

Vibration sensitivity of spacecraft structure under diffused and standing wave acoustic field load
Naotaka Kumagai, Ichiro Hagiwara (Tokyo Institute of Technology), Hiroaki Morimura, Qinzhog Shi, Shigemasa Ando, Masahiro Tsuchihashi

Room: K310

10:00-11:00 General Session 15: Agent-based Modeling
Session Chair: TBD

5 Pandemic Simulations by MADE: the Hybrid Method of Multi-Agent and Differential Equations
Hideo Hirose, Yuki Toyosaka (Kyushu Institute of Technology)

36 Multi-Agent System Architecture of Formation Behavior of Airplanes
Liu Yue-feng, Zhang An (Northwestern Polytechnical University)

153 Stochastic individual based simulation for land-uses
Alexandre MUZY (CNRS)

164 Potential Benefits of Symbiotic Simulation to Pedestrian Evacuation
Seth Hetu (NUS), Gary Tan (NUS)

13:00-14:00 Lunch Break

14:00-15:00 General Session 16: Antenna Design
Session Chair: TBD

75 Gain and Radiation Improvement Technique for Rectangular Patch Antenna
Sutham Satthamsakul, Sutheera Puntheenanurak, Chawalit Benjangkaprasert, Noppin Anantrasirichai (KMITL), Wakabayashi Toshio (TOKAI)

76 Compact CPW-Fed Wide Slot Antenna for Ultra-Wideband Applications
Weerathep Kueathaweekun, Boonchana Purahong, Noppin Anantrasirichai, Chawalit Benjangkaprasert (KMITL), Toshio Wakabayashi (Tokai University)

80 Study on Microstrip Line Fed Rectangular Slot Antenna for Widen Bandwidth
Tuanjai Achevapanich (MUTSB), Napob Arsusiri, Noppin Anantrasirichai, Boonchana Purahong, Ornlarb Sangaroonsri (KMITL)

89 A Coplanar UWB antenna with notch frequency response
Kritapol Narkcharoen (RMUTT)

Room: K304

10:00-11:00 General Session 17: Transportation System I
Session Chair: TBD
97 Acquisition of Negotiation Rules for AGV Transportation System by Genetic Based Machine Learning Techniques
Koichi Tanabe, Daisaku Yamada, Kazutoshi Sakakibara, Ikuko Nishikawa
(Ritusmeikan University)
15 Research on Train Tracing Simulation System under Moving Block
Ziyan MA (Shanghai University of Engineering Science)
43 Swinging-up and Stabilizing Control of Inverted Pendulum on Cart System by Hybrid Controller
Ekachai Asa (CATC), Taworn Benjanarasuth (KMITL), Noriyuki Komine (Tokai University)
100 Virtual Social Experiments Using Multi-Agent Based Traffic and Environment Simulator MATES
Hideki Fujii, Shinobu Yoshimura, Shintaro Bunya, Yoshifumi Kimura (The University of Tokyo)

13:00-14:00 Lunch Break

14:00-14:45 General Session 18: Transportation System II
Session Chair: TBD
107 Automatic Controller of Ms Pac-Man and Its Performance: Winner of the IEEE CEC 2009 Software Agent Ms. Pac-Man Competition
Ruck Thawonmas, Hiroshi Matsumoto (Ritsumeikan University)
147 Road Traffic Accident Model considering Driver’s Accident Experience
Yasushi Nishida (National Research Institute of Police Science), Toshiharu Kagawa (Tokyo Institute of Technology)
167 World’s First Train Simulation System with Variable-Speed Playback of High-Definition Video
Hisayoshi Ikeda (Fujitsu Ltd.)

Room: K305

10:00-11:00 General Session 21: System Design
Session Chair: Satoshi Denno (Kyoto University)

70  Supply-chain simulation using a hybrid-modeling method
    Shigeki Umeda, Fang Zhang (Musashi University)

33  Theoretical Analysis and Object-Oriented Design of Aggregation and Disaggregation in Multi-Resolution Modeling System
    Liu Baohong (NUDT)

103 A Component-Based Performance Classification System for Model-Based Co-Design Approaches
    Andreas Liehr (UniBw München), Klaus Buchenrieder (Universität der Bundeswehr München)

171 HLA Interface for Combined Discrete Event & Discrete Time Simulation Model in Distributed Environment
    Sol Ha, Ju-Hwan Cha, Kyu-Yeul Lee (Seoul National University)