Program of IES2010

November 19, 2010 (Fri)

Time	Content
8:00 – 8:55	**Registration** (The Front of Conferernce Room)
8:55 – 9:00	**Opening Remarks: Akira Namatame** (Conference Room)

9:00 – 11:00	**Session1: Network and Intelligence**
	Chair: Keiki Takadama
	(Conference Room)
	Quantifying Plural Corresponding Community in Bipartite Graphs
	    Keiu Harada, Ikuo Suzuki, Masahito Yamamoto and Masashi Furukawa
	Visualizing Complex Network by Use of Local Energy Minimization
	    Masashi Furukawa, Ryota Shigeo, Ikuo Suzuki, Masahito Yamamoto and Michiko Watanabe
	A New Cellular Automaton Model Reproduce Kerner's Three-phase Theory by Decelerating Damping Effect
	    Satoshi Kokubo, Jun Tanimoto and Aya Hagishima
	A New Cellular Automaton Model for Lane Changing for Accurate Analysis on Traffic-flow
	    Shinji Kukida, Jun Tanimoto and Aya Hagishima
	Multi-scaled Adaptability in Motility and Pattern Formation of the Physarum Plasmodium
	    Tomohiro Shirakawa, Kan Yokoyama, Masaki Yamachiyo, Yukio-Pegio Gunji and Yoshihiro Miyake
	Implementation Method of Genetic Algorithms to CUDA Environment using Data Parallelization
	    Masashi Oiso, Yoshiyuki Matsumura, Toshiyuki Yasuda and Kazuhiro Ohkura

11:00 – 11:20	**Coffee Break**

11:20 – 13:00	**Session2: Learning**
	Chair: Hisashi Handa
	(Conference Room)
	Pittsburgh-style Learning Classifier System for Multiple Environments: Towards Robust Waterbus Route for Several Situations
	    Keiji Sato and Keiki Takadama
	Cartesian Genetic Programming with Reusable Genes
	    Akira Hara, Kotaro Muraoka, Takumi Ichimura and Tetsuyuki Takahama
	Conflict Avoidance using Information Entropy in Multi-Agent Learning Environment
	    Yoshihiro Ichikawa, Kiyohiko Hattori and Keiki Takadama
	Neuroevolution with Manifold Learning for Playing Mario
	    Hisashi Handa
	Rotation Effect of Training Data Subsets in Parallel Distributed Fuzzy Genetics-based Machine Learning
	    Yusuke Nojima, Shingo Mihara and Hisao Ishibuchi

13:00 – 13:55	**Lunch Break**

13:55 – 14:55	**Session3: Sensor**
	Chair: Keiji Suzuki
	(Conference Room)
	Neural Network based Estimation of Crowd Behavior using ZigBee's RSSI in Indoor Space
	    Masaya Arai, Hidenori Kawamura and Keiji Suzuki
	A System for Dynamic Learning of Scene Description
	    Matthias Mueller, Kousuke Sekiyama, Toshio Fukuda and Paul Levi
	Motion Novelty Scoring for Interest Region Selection
	    Mark Silberberger, Kousuke Sekiyama, Toshio Fukuda and Paul Levi

14:55 – 15:10	**Coffee Break**

15:10 – 16:50	**Session4: Economics and Finance**
	Chair:Aki-Hiro Sato
	(Conference Room)
	Two-Step Genetic Algorithm Procedures for Facility Rearrangement Planning with Cost Constraint
	    Atsushi Suzuki and Hisashi Yamamoto
	ε Constrained Differential Evolution for Economic Dispatch with Valve-point Effect
	    Nasimul Noman and Hitoshi Iba
	Parameter Estimation Methods of a Multiplicative Stochastic Process for the Analysis of Financial Time Series: An Application to Inference of Tail-risks
	    Aki-Hiro Sato, Jaba Ghonghadze, Tae-Seok Jang, Friedrich Wagner and Thomas Lux
	Proposing Asset Selection Model by Multivariate Statistics Based on Management Indices
	    Tomokazu Sasaki, Yukiko Orito, Hisashi Yamamoto and Yasushi Kambayashi
	Dynamic Asset Selection by Using Mathematical Properties of Information Ratio
	    Toru Kurazumi, Yukiko Orito, Hisashi Yamamoto and Yasuhiro Tsujimura

16:50 – 17:00	**Break**
17:00 – 18:00	**Keynote Speech** (Conference Room) Chair: Kazuhiro Ohkura Artificial Evolution meets Metagenomics: the Binomic GA for Evolving Symbiotic Systems Dr. Inman Harvey
18:00 – 18:30	**Break**
18:30 – 20:30	**Banquet** (Banquet Room: EBISU)

November 20, 2010 (Sat)

9:00 | 11:00	**Session5: Robotics**
	Chair: Masao Kubo
	(Conference Room)
	Evolving a Goal Selection Strategy for a Robot Tour Guide
	Alex Fukunaga, Hideru Hiruma, Kazuki Komiya and Hitoshi Iba
	Setting Methods of Network Parameters for Reinforcement Learning Equipped with Artificial Neural Networks
	Kazuaki Yamada
	Analysis of Behavioural Strategy on ER using Self-Organizing Maps
	Masanori Goka, Yoshiyuki Matsumura and Kazuhiro Ohkura
	The Analysis of Autonomous Specialization Process in Reinforcement Learning Arm-Type Robots Cooperating with a Human
	Toshiyuki Yasuda and Kazuhiro Ohkura
	Autonomous Locomotion Control for Multi-Legged Virtual Robots
	Masahito Yamamoto, Kazuya Ojiri, Ikuo Suzuki and Masashi Furukawa
	Introduction of Scientific Cloud Concept for Industry Application
	Zlatan Car, Dario Ogrizovic, Branimir Barisic and Branko Katalinic

11:00 | 11:20	**Coffee Break**

11:20 | 13:00	**Session6: Multi Agent Systems**
	Chair:Saori Iwanaga
	(Conference Room)
	An Institutional Comparison of Transaction Mechanisms for a Market-based Model
	Masayuki Ishinishi, Yuhsuke Koyama, Hiroshi Deguchi and Hajime Kita
	Effect of Information Sharing in Combat Simulation
	Aya Fusano, Hiroshi Sato and Akira Namatame
	Collective Localization by Self Organization - 3 Dimensional Target Enclosure Behavior
	Masao Kubo, Takahiro Tanaka and Hiroshi Sato
	Hybrid Evolutionary Algorithm based on (μ ,λ) Evolution Strategies and Particle Swarm Optimization applies to a Car Racing Problem
	Yoshiyuki Matsumura, Eisuke Nakahara, Masanori Goka, Toshiyuki Yasuda and Kazuhiro Ohkura
	Game Analysis and Modeling the Social Utilization of Shared Resources Based on Traveling Salesperson Problem
	Ryota Ono, Hidenori Kawamura and Keiji Suzuki

13:00 | 14:00	**Lunch Break**

14:00 | 15:00	**Keynote Speech** (Conference Room)
	Chair: Kazuhiro Ohkura
	Recent Trends in Evolutionary Multiobjective Optimization Research
	Dr. Hisao Ishibuchi

15:00 | 15:15	**Coffee Break**

15:15 | 17:35	**Session7: Society**
	Chair: Hiroshi Sato
	(Conference Room)
	Dynamic Diffusion Process in Evolutionary Optimized Networks
	Takanori Komatsu and Akira Namatame
	Developing An Input Method by Evolution Strategies for Employing Users' Variation
	Shuhei Miyoshi, Hiroshi Kawakami and Hisashi Handa
	Conversation Characteristics of Older Adults in Care Facilities
	Takashi Otani, Jun Ota and Mihoko Otake
	Development of Semi-automated Conversation Measuring System
	Takuya Ueshima, Jun Ota and Mihoko Otake
	Optimum Picking Navigation for Large-scale Logistic Center under Energy Minimization
	Makiko Takahashi, Ikuo Suzuki, Masahito Yamamoto, Michiko Watanabe and Masashi Furukawa
	Stability, Localization and Application to Dynamic Plane Covering Problem of Swarm Leading Control
	Keitaro Naruse, Keigo Suenaga and Shigeaki Hukui
	Analysis of Nonhomogeneous Yielding by Means of Different Intelligent System Based on Stochastic and Finite Element Method
	Branimir Barisic, Miroslav Plancak and Zlatan Car

17:35 | 17:40	**Closing Remarks: Kazuhiro Ohkura** (Conference Room)