Program of SCIS & ISIS 2016

August 25, 2016 (Thu)

13:00-17:00 Registration

18:00- Welcome Reception @ Sapporo Park Hotel 3F "EMERALD"

August 26, 2016 (Fri)

8:50-9:20 Opening Ceremony

9:20-10:20 Plenary Talk 1 (Chair: Takahiro Yamanoi (Hokkai Gakuen University, Japan))

Multicriteria Decision Making with Interacting Criteria

Prof. Michel Grabisch

(University of Paris Panthéon-Sorbonne, Paris School of Economics, France)

10:20-10:40 Break

10:40-12:00 Parallel Sessions

[Fr2-1] GS: Intelligent Systems and Robot

Chair: Junji Nishino (The University of Electro-Communications, Japan)

10:40-11:00 Fuzzy Evaluation of Macroscopic Situation for Turn based Strategic Games
Kosuke Muto and Junji Nishino

11:00-11:20 Gait Recognition from Freestyle Walks Using Relative Coordinates and Random

Subsequence-Based Sum-Rule Classification

Nitchan Jianwattanapaisarn, Nirattaya Khamsemana, and Cholwich Nattee

11:20-11:40 Learning Adaptive Escape Behavior for Wheel-Legged Robot by Inner Torque Information

Yuki Nishimura and Sadayoshi Mikami

11:40-12:00 Dynamic Global PID Sliding Mode Control for MEMS Gyroscope Using Adaptive Neural

Controller

Juntao Fei and Yundi Chu

[Fr3-1] OS: Theories and Applications of Evolutionary Algorithms (1)

Chair: Yoshiko Hanada (Kansai University, Japan)

10:40-11:00 Dimension Reduction EA for Portfolio Replication Problem: Search Space Change by Fixing Important Variables

Yukiko Orito and Yoshiko Hanada

11:00-11:20 A Study on Stepwise Satisfaction Method of Constraints Based on Difficulty of Constraints

Ryo Ooe and Tomohiro Yoshikawa

11:20-11:40 Evolutionary Algorithmic Parameter Optimization of MOEAs for Multiple Multi-Objective Problems Motoaki Kakuguchi, Minami Miyakawa, Keiki Takadama, and Hiroyuki Sato

11:40-12:00 The Effectiveness of Considering the Intrinsic Characteristics for Nurse Scheduling Problem

Junya Inafune and Shinya Watanabe

[Fr4-1] OS: Clustering (1)

Chair: Akira Notsu (Osaka Prefecture University, Japan)

10:40-11:00 On Possibilistic Clustering Algorithms Based on Noise Clustering Yuchi Kanzawa

GS: Decision Making and Risk

11:00-11:20 Application of the UCT Algorithm for Noisy Optimization Problems
Akira Notsu, Satoshi Kane, Seiki Ubukata, and Katsuhiro Honda

11:20-11:40 A Novel Bipolar MCDM Model Using Rough Sets and Three-Way Decisions for Decision Aids Kao-Yi Shen and Gwo-Hshiung Tzeng

11:40-12:00 A Subjective and Objective Constructing Approach for Reasonable Membership Function Based on Mathematical Programming

Takashi Hasuike and Hideki Katagiri

[Fr5-1] OS: Soft Computing Techniques for Computer Vision

Chair: Motonori Doi (Osaka Electro-Communication University, Japan)

Co-Chair: Yoshimichi Ito (Osaka Electro-Communication University, Japan)

10:40-11:00 A Least Median of Squares Method Based on Fuzzy Reinforcement Learning for Modeling of Computer Vision Applications

Toshihiko Watanabe and Tomoki Ishimaru

11:00-11:20 Estimation of Camera Projection Matrix Using Linear Matrix Inequalities
Yoshimichi Ito and Yuta Oda

11:20-11:40 Analysis of Rearview Image Sequence of Motorcycle for Defensive Driving Motonori Doi and Junpei Oritate

OS: Action & Behavior Analysis for Surveillance & Other Applications

11:40-12:00 Tracking Visitors in a Real Museum for Behavioral Analysis
Md. Golam Rashed, Ryota Suzuki, Takuya Yonezawa, Antony Lam, Yoshinori Kobayashi, and
Yoshinori Kuno

[Fr6-1] OS: Soft Intelligent SoC

Chair: Yukinobu Hoshino (Kochi University of Technology, Japan)

10:40-11:00 Pipeline Labeling Algorithm with Parallel Calculation of Gravity Center on FPGAMasahiro Shimasaki and Yukinobu Hoshino

11:00-11:20 Evaluation of Optimization Methods for Neural Network

Yuto Yasuoka, Yukinobu Hoshino, and Yuki Shinomiya

11:20-11:40 An-FPGA Based Classification System by Using a Neural Network and an Improved Particle

Swarm Optimization Algorithm

Tuan Linh Dang and Yukinobu Hoshino

11:40-12:00 An Analysis of Dependency of Prior Probability for Codebook-Based Image Representation

Yuki Shinomiya and Yukinobu Hoshino

[Fr7-1] OS: Application to Managerial Decision Making

Chair: Sangheon Han (Nagoya University of Commerce & Business, Japan)

10:40-11:00 Input Quantity Commitment in Vertically Related Industries

Joonghwa Oh and Jaewook Kim

11:00-11:20 Can We Duplicate a Sequential Game with an Asymmetric Simultaneous Game

DongJoon Lee

11:20-11:40 A Study on Analytic Hierarchy Process Structural Design - The Case of the Fixed Income Market

Portfolio to Worldwide -

Sangheon Han

12:00-13:10 Lunch Break

13:10-14:10 Plenary Talk 2 (Chair: Byung-Jae Choi (Daegu University, Korea))

Machine Learning for Computer Vision

Prof. Seong G. Kong

(Sejong University, South Korea)

14:10-14:30 Break

14:30-16:10 Parallel Sessions

[Fr1-2] Invited Talk 1 (40-50 minutes Talk and about 10 minutes Discussion)

14:30-15:30 Interactive Design Support System Using Kansei Information

Prof. Takehisa Onisawa (University of Tsukuba)

Chair: Toshihiko Watanabe (Osaka Electro-Communication University, Japan)

[Fr2-2] OS: Human Activity Estimation by Particle Filters

Chair: Norikazu Ikoma (Nippon Institute of Technology, Japan)

14:30-14:50 Motion Prejudgment Dependent Mixture System Noise in System Model for Tennis Ball 3D

Position Tracking by Particle Filter

Yuan Wang, Xina Cheng, Norikazu Ikoma, Masaaki Honda, and Takeshi Ikenaga

14:50-15:10 Real-time Posture Imitation of Biped Humanoid Robot Based on Particle Filter with Simple Joint Control for Standing Stabilization
Yo Kondo, Shohei Yamamoto, and Yasutake Takahashi

GS: Multivariate Analysis

15:10-15:30 Data Compression with Linear Discriminant Analysis
Yan Pei

15:30-15:50 One Missing Value Problem in Latin Square Design of Any Order: Regression Sum of Squares Kittiwat Sirikasemsuk

15:50-16:10 Study of Multi-distributed Generation Behavior When Fault Occurrence in Distribution System
Using Wavelet Transform
Santipont Ananwattanaporn and Atthapol Ngaopitakkul

[Fr3-2] OS: Theories and Applications of Evolutionary Algorithms (2)

Chair: Shinya Watanabe (Muroran Institute of Technology, Japan)

14:30-14:50 Probabilistic Model-Based Multistep Crossover for Genetic Programming Kohei Matsumura, Yoshiko Hanada, and Keiko Ono

14:50-15:10 Extracting Different Abstracted Level Rule with Variance-Based LCSCaili Zhang, Takato Tatsumi, Masaya Nakata, Keiki Takadama, Hiroyuki Sato, and Tim Kovacs

15:10-15:30 Evaluation of Three Steady-State NSGA-III Offspring Selection Schemes for Many-Objective Optimization

Courtney Powell, Phyo Thandar Thant, and Masaharu Munetomo

15:30-15:50 Effects of Different Implementations of a Real Random Number Generator on the Search
Behavior of Multiobjective Evolutionary Algorithms
Takahiro Funakoshi, Yusuke Nojima, and Hisao Ishibuchi

[Fr4-2] OS: Rough Sets, Granular Computing and Their Applications (1)

Chair: Yasuo Kudo (Muroran Institute of Technology, Japan)

14:30-14:50 On Apriori-Based Rule Generation in SQL - A Case of the Deterministic Information System Chenxi Liu, Hiroshi Sakai, Xiaoxin Zhu, and Michinori Nakata

14:50-15:10 Rough Approximations from Indiscernibility Relations under Incomplete Information Michinori Nakata and Hiroshi Sakai

15:10-15:30 The Rough Set *k*-Means Clustering Seiki Ubukata, Akira Notsu, and Katsuhiro Honda

15:30-15:50 A Linguistic Representation Method for Kansei Data
Sapa Chanyachatchawan, Hong-Bin Yan, Songsak Sriboonchitta, and Van Nam Huynh

15:50-16:10 Investigation of the Relationship between Upper Body Poses and Emotions Using the Evaluation Grid Method

Misaki Ogawa, Saerom Lee, and Yoshifumi Okada

[Fr5-2] OS: Marketing Analysis

Chair: Kazuhiro Takeyasu (Tokoha University, Japan)

14:30-14:50 Utilization of Genetic Algorithm in Allocating Goods to Shop Shelves Yuki Higuchi and Kazuhiro Takeyasu

14:50-15:10 The Method to Improve Forecasting Accuracy under the Utilization of Neural Network Kazuhiro Takeyasu, Yuki Higuchi, and Yuta Tsuchida

15:10-15:30 Multivariate Analysis on a Questionnaire Investigation for the Rare Sugars
Yasuo Ishii, Kazuhiro Takeyasu, Hiromasa Takeyasu, and Daisuke Takeyasu

OS: Fuzzy Inference Systems

Chair: Tomoharu Nakashima (Osaka Prefecture University, Japan)

15:30-15:50 Application to a Medical Diagnosis System by Extended Functional-type SIRMs Connected Fuzzy Inference Method

Diederik van Krieken, Hirosato Seki, and Masahiro Inuiguchi

15:50-16:10 Position Prediction of Opponent Players by SIRMs Fuzzy Models for RoboCup Soccer 2D Simulation

Tomonari Nakade, Tomoharu Nakashima, Hidehisa Akiyama, and Hirosato Seki

[Fr6-2] SS: Social Network Analysis

Tomoe Entani (University of Hyogo, Japan)

14:30-14:50 Iterating Influence in Social NetworksMichel Grabisch and Agnieszka Rusinowska

GS: Social Network and Multiagent Systems

14:50-15:10 Link Prediction in Scientists Collaboration with Author Name and Affiliation Muhammad Ilias Amin and Kazuyuki Murase

15:10-15:30 Learning Evaluation Function for Decision Making of Soccer Agents Using Learning to Rank Hidehisa Akiyama, Masashi Tsuji, and Shigeto Aramaki

15:30-15:50 Analysis of Coherence Resonance in Kaldor-Kalecki Business Cycle Model
Sou Nobukawa, Ryohei Hashimoto, Haruhiko Nishimura, Teruya Yamanishi, and Masaru Chiba

OS: Social Implementation of Practical and Intelligent Systems (1)

15:50-16:10 Detecting Cyberbullying with Morphosemantic Patterns

Michal Ptaszynski, Fumito Masui, Yoko Nakajima, Yasutomo Kimura, Rafal Rzepka, and Kenji

Araki

[Fr7-2] Special Session on Intelligent Systems

Chair: Jae-Young Pyun (Chosun University, Korea);

Suk-seung Hwang (Chosun University, Korea)

14:30-14:50 RFID Management System for Efficient Reusing Construction Materials

Tae-Yun Kim, Ji-Youn Mun, and Suk-Seung Hwang

14:50-15:10 Positioning Protocol Design for IEEE 802.15.4a UWB based RTLS

Dae-Ho Kim, Jeong-Hoon Lee, Jae-Young Pyun

16:10-16:30 Break

16:30-17:50 Parallel Sessions

[Fr1-3] Invited Talk 2 (40-50 minutes Talk and about 10 minutes Discussion)

16:30-17:30 Dynamic Fuzzy Q-learning with Forgetting Facility

Prof. Motohide Umano (Osaka Prefecture University, Japan)

Chair: Masahiro Inuiguchi (Osaka University, Japan)

[Fr2-3] OS: Human Symbolic Systems (1)

Chair: Yoichiro Maeda (Institute of Technologists, Japan)

Co-Chair: Tomohiro Yoshikawa (Nagoya University, Japan)

16:30-16:50 Impression of Deformation Face Robots with and without a Soft Skin

Hisashi Chihara and Masayoshi Kanoh

16:50-17:10 Behavior Model for Hearing-Dog Robot

Hoshito Kudo, Tomoya Koizumi, Tsuyoshi Nakamura, Masayoshi Kanoh, and Koji Yamada

17:10-17:30 Effects of Collaborative Learning between Educational-Support Robots and Children who

Potential Symptoms of a Development Disability

Felix Jimenez, Tomohiro Yoshikawa, Takeshi Furuhashi, Masayoshi Kanoh, and Tsuyoshi

Nakamura

17:30-17:50 A Study on Evaluation Analysis for Products Using Topic Model

Shingo Tsukioka, Tomohiro Yoshikawa, and Takeshi Furuhashi

[Fr3-3] GS: Distributed Systems and Evolutionary Computation

Chair: Yusuke Nojima (Osaka Prefecture University, Japan)

16:30-16:50 Overlay Optimization for Cost Efficient P2P Streaming Service

Hidekazu Suzuki, Mianxiong Dong, He Li, Kaoru Ota, and Chaofeng Zhang

16:50-17:10 Heuristic Task Scheduling with Artificial Bee Colony Algorithm for Virtual Machines

Warangkhana Kimpan and Boonhatai Kruekaew

17:10-17:30 Solving Performances of Piecewise-linear Particle Swarm Optimizer with Chaotic Dynamics

Tomoyuki Sasaki, Hidehiro Nakano, Arata Miyauchi, and Akira Taguchi

17:30-17:50 Multi-Objective Hadoop Configuration Optimization Using Steady-State NSGA-II

Phyo Thandar Thant, Courtney Powell, Akiyoshi Sugiki, and Masaharu Munetomo

[Fr4-3] OS: Cognitive Robotics

Chair: Chu Kiong Loo (University of Malaya, Malaysia)

16:30-16:50 The Inference of Robot Utterance Timing Based on Vehicle Acceleration Condition
Yoshikazu Okajima, Hiroyuki Masuta, Toru Oshima, Ken'ichi Koyanagi Tatsuo Motoyoshi, and
Eiichi Takayama

16:50-17:10 Genetic Optimized Fuzzy Extreme Learning Machine Ensembles for Affect Classification Wei Shiung Liew, Chu Kiong Loo, and Takenori Obo

17:10-17:30 Towards Hand-Object Gesture Extraction from Depth Image Dongxu Gao, Zhaojie Ju, Jiangtao Cao, and Honghai Liu

17:30-17:50 Health Promotion Using Smart Device Interlocked Robot Partners for Elderly People Sigi Sun, Takenori Obo, Chu Kiong Loo, and Naoyuki Kubota

[Fr5-3] OS: e-Navigation and Its applications

Chair: Jung Sik Jeong (Mokpo Maritime National University, Korea)

Co-Chair: Yukinobu Hoshino (Kochi University of Technology, Japan)

16:30-16:50 Visualization of Ship Collision Risk Based on Near-miss Accidents Kim Kwang-II and Jung Sik Jeong

16:50-17:10 A Study on the Implementation of Intelligent Navigational Risk Assessment System with IoT Sensor

Do-Yeon Kim and Kil-yong Kim, Gyei-Kark Park, and Jung Sik Jeong

17:10-17:30 A Study on Data Model and Prototype for Developing a MSI (Maritime Safety Information)

Service

Sewoong Oh, Dongwoo Kang, Eivind Mong, and Byungmoon Park

17:30-17:50 Position Service Integrity Analysis of GPS/DGPS Signals in Port Environment Youngki Kim, Kiyeol Seo, Sanghyun Park, and Tae Hyun Fang

[Fr6-3] GS: Neural Networks

Chair: Tetsuya Hoya (Nihon University, Japan)

16:30-16:50 Self-Organizing Maps for Multi-System and Multi-View Datasets
Hideaki Ishibashi and Tetsuo Furukawa

16:50-17:10 Single-layered Complex-Valued Neural Network with SMOTE for Imbalanced Data Classification Kentaro Matsuda and Kazuyuki Murase

17:10-17:30 On the Parameter Setting of a Network-Growing Algorithm for Radial Basis Kernel Networks

Tetsuya Hoya

17:30-17:50 Improvement of Sensory Information Processing by Balancing Tonic and Phasic Subthreshold
Neuronal Excitation
Asahi Ishiyama, Hiroakira Matsui, Kazuhiro Tsuboi, Kazuo Watanabe, and Osamu Hoshino

August 27, 2016 (Sat)

9:00-10:00 Plenary Talk 3 (Chair: Takahiro Yamanoi (Hokkai Gakuen University, Japan))

Reality 2.0 and Wisdom Computing – Our Vision Toward the Future

Dr. Kazuo Iwano

(Japan Science & Technology Agency, Japan)

10:00-10:20 Break

10:20-12:00 Parallel Sessions

[Sa1-1] Invited Talk 3 (40-50 minutes Talk and about 10 minutes Discussion)

Chair: Jung Sik Jeong (Mokpo Maritime National University, Korea)

10:20-11:20 Brain-inspired Artificial Intelligence: Model-based and Model-free Control

Dr. Sang Wan Lee (KAIST, Korea)

[Sa2-1] OS: Multimedia Revolution

Chair: Tetsuya Kojima (National Institute of Technology, Tokyo College, Japan)

10:20-10:40 An Efficient Random Unitary Matrix for Biometric Template Protection

Yuko Saito, Ibuki Nakamura and Sayaka Shiota, and Hitoshi Kiya

10:40-11:00 An Interactive Speech Synthesizer Developed with Pure Data and Touch OSC

Naofumi Aoki and Keisuke Ai

11:00-11:20 A Disaster Prevention Broadcasting Based on Audio Data Hiding Technology

Tetsuya Kojima, Kan Kamada, and Udaya Parampalli

11:20-11:40 Review-Based Service Profiling and Recommendation

Toshihiko Yamasaki, Masafumi Yamamoto, and Kiyoharu Aizawa

[Sa3-1] OS: Intelligent Robotics and Vehicle System

Chair: Young J. Ryoo (Mokpo National University, Korea)

10:20-10:40 Active Steerable Driving Mechanism Using Two In-Wheel Motors for Omnidirectional Motion of

Robotic Mobile Platform

Young-Jae Ryoo, Susan Park, Yong-Jun Lee, and Kyung Seok Byun

10:40-11:00 Robot Sports Game and Its Strategy as Intelligent System and Soft Computing

Young-Jae Ryoo, Ki-Nam Lee, Woo-Ram Gil, Dae-Yeong Im, and Da-Jung Yoon

11:00-11:20 Dynamic Simulation of Caster Wheel Considering Initial Steering Angle

Seungyoung Yang, Pilgu Lee, Young-Jae Ryoo, and Kyung Seok Byun

OS: Soft Computing to Real World Application

11:20-11:40 Decision Tree Ensemble Classifiers for Anomalous Propagation Echo Detection

Hansoo Lee and Sungshin Kim

11:40-12:00 An Application of Fuzzy Time Series Forecasting
Jin Hee Yoon and Joocheol Kim

[Sa4-1] OS: Clustering (2)

Chair: Katsuhiro Honda (Osaka Prefecture University, Japan)

10:20-10:40 Hierarchical and Non-hierarchical Medoid Clustering Using Asymmetric Similarity Measures Sadaaki Miyamoto, Yousuke Kaizu, and Yasunori Endo

10:40-11:00 A Note on Even-Sized Clustering Based on Optimization

Tsubasa Hirano, Yasunori Endo, Naohiko Kinoshita, and Sadaaki Miyamoto

11:00-11:20 A Method of Two-Stage Clustering Based on Cluster Validity Measures
Ryo Ozaki, Yukihiro Hamasuna, and Yasunori Endo

11:20-11:40 On Kernelized Sequential Hard Clustering
Yukihiro Hamasuna and Yasunori Endo

11:40-12:00 Families of Triangular Norm Based Kernel Function and Its Application to Kernel *k*-Means Kazushi Okamoto

[Sa5-1] OS: Brain Computing and Embodies Knowledge (1)

Chair: Suguru N Kudoh (Kwansei Gakuin University, Japan)

Co-Chair: Isao Hayashi (Kansai University, Japan)

10:20-10:40 Study on Monitoring Method Using a Wrist Watch Type Device for Unsafe Behavior Michiyuki Hirokane and Kenta Kamijo

10:40-11:00 Experiment of Disaster Prevention Education and Evaluation Using a Torrential Rain Simulated Experience Application

Kazuaki Nishiwaki and Takahiro Endo

11:00-11:20 Spatiotemporal Human Brain Activities on Recalling Fruit Names Koji Sugimoto, Takahiro Yamanoi, Hisashi Toyoshima, Mika Otuki, Shin-ichi Ohnishi, and Toshimasa Yamazaki

11:20-11:40 Analysis of Air Flow and Chest Volume for Sleep Apnea

Douglas E. Dow, Jacob G. Reed, and Marilyn Urrea

11:40-12:20 Correlation of Brain Activity and Questionnaire at the Decision-Making Keita Mitani and Yukinobu Hoshino

[Sa6-1] OS: Intelligent Systems and Its Applications

Chair: Byung-Jae Choi (Daegu University, Korea)

Co-Chair: Noboru Takagi (Toyama Prefectural University, Japan)

10:20-10:40 Design of Fuzzy Logic System for Position Control of Quad-Copter Hyun-Ho Yoo, Han Sang Kim, and Byung-Jae Choi

10:40-11:00 Design of Fuzzy Sliding Mode Controller for Maglev Transportation System

Luat Huu Tran and Yong-Tae Kim

11:00-11:20 Performance Evaluation of Big Data Technology on Designing Big Network Traffic Data Analysis
System

Nattawat Khamphakdee, Nunnapus Benjamas, and Saiyan Saiyod

[Sa7-1] GS: Transportation Systems

Chair: Takamasa Akiyama (Kansai University, Japan)

10:20-10:40 A Reinforcement Learning Based Dynamic Power Management for Fuel Cell Hybrid Electric Vehicle

Roy Chaoming Hsu, Shi-Mao Chen, Wen-Yen Chen, and Cheng-Ting Liu

10:40-11:00 Comparison of Objective Function Evaluators for a Stochastic Orienteering Problem Vassilis Papapanagiotou, Roberto Montemanni, and Luca Maria Gambardella

OS: Soft Computing in Urban and Transport Planning

11:00-11:20 Multi-Agent Simulation of Commuting Modal Shift Considering with Health Conscious Masashi Okushima

11:20-11:40 Debris Treatment Planning for Large-Scale Earthquakes Using Fuzzy Information Hiroaki Inokuchi and Takamasa Akiyama

11:40-12:00 Application of Fuzzy Decision Tree to Analyze the Attitude of Citizens for Wellness City Development

Takamasa Akiyama and Hiroaki Inokuchi

12:00-13:10 Lunch Break

13:10-14:50 Parallel Sessions

[Sa1-2] Invited Talk 4 (40-50 minutes Talk and about 10 minutes Discussion)

13:10-14:10 (Multivariate) Empirical Mode Decomposition Filter Banks and a Quintet Singular Value Decomposition

Prof. Min-sung Koh (Eastern Washington University, USA)

Chair: Syoji Kobashi (University of Hyogo, Japan)

[Sa2-2] OS: Intelligent Systems Based on Bio-signal Processing and Human Behavior Analysis

Chair: Hideaki Touyama (Toyama Prefectural University, Japan)

Co-Chair Hironobu Takano (Toyama Prefectural University, Japan)

13:10-13:30 Emotional Face Retrieval with P300 Signals of Multiple Subjects
Junwei Fan and Hideaki Touyama

13:30-13:50 Effectiveness of Tangible Programming Tool Using RFID System

Tatsuo Motoyoshi, Naoki Tetsumura, Hiroyuki Masuta, Ken'ichi Koyanagi, Toru Oshima, and

Hiroshi Kawakami

13:50-14:10 Tangible Programming Tools Equipping RFID System

Naoki Tetsumura, Tatsuo Motoyoshi, Toru Oshima, Ken'ichi Koyanagi, Hiroyuki Masuta, and
Hiroshi Kawakami

14:10-14:30 Consideration of the Experience of a Blind User Using a Tactile Graphics Editor Available for Blind People

Yuji Masaki, Tatsuo Motoyoshi, and Noboru Takagi

14:30-14:50 Development of Measurement Method of Pupil Diameter under Visible-Light Condition Yuki Morita, Hironobu Takano, and Kiyomi Nakamura

[Sa3-2] OS: Robotics for Socio Synthesis

Chair: Yasunori Takemura (Nishinippon Institute of Technology, Japan)

13:10-13:30 Adaptive Color Tracking for Particle Filter to Control a Drone in a Forest Keiji Kamei, Kazu Narumi, and Daisuke Shuto

13:30-13:50 Mathematical Modeling and Motion Analysis of the Wheel Based Ball Retaining Mechanism Kenji Kimura, Kazuo Ishii, Yasunori Takemura, and Motoji Yamamoto

13:50-14:10 Depth-Based Visual Servoing Using Low-Accurate Arm

Ludovic Hofer, Michio Tanaka, Hakaru Tamukoh, Amir Ali Forough Nassiraei, and Takashi Morie

14:10-14:30 Motion Analysis and Control of the Ball Operation for Dribbling Action in RoboCup Soccer Robot Shota Chikushi, Tharindu Weerakoon, Kazuo Ishii, and Takashi Sonoda

14:30-14:50 Tomato Harvesting Robot Competition
Kazuo Ishii, Yasunori Takemura, Takeyuki Matsuo, and Takashi Sonoda

[Sa4-2] OS: Rough Sets, Granular Computing and Their Applications (2)

Chair: Tomoe Entani (University of Hyogo, Japan)

Co-Chair: Masahiro Inuiguchi (Osaka University, Japan)

13:10-13:30 Improvement of Item-Based Collaborative Filtering by Adding Time Factor and Covering Degree Zhipeng Zhang, Yasuo Kudo, and Tetsuya Murai

13:30-13:50 Variety of Rough Set Based Attribute Importance
Masahiro Inuiguchi

OS: Interval/Fuzzy Models for Multiple Criteria Decision Making

13:50-14:10 Improvement of Interval Weight Estimation in Interval AHP
Shigeaki Innan and Masahiro Inuiguchi

14:10-14:30 Individual Decisions Affected by Group Decision Based on Surely Assigned Weight Tomoe Entani

14:30-14:50 Consistent Fuzzy Analytic Hierarchy Process by Considering Fuzzy Input and Output Data

Jih-Jeng Huang

[Sa5-2] OS: Brain Computing and Embodies Knowledge (2)

Chair: Isao Hayashi (Kansai University, Japan)

Co-Chair: Suguru N Kudoh (Kwansei Gakuin University, Japan)

13:10-13:30 An Analysis for Switching of Feedback and Feedforward Mechanism in Motor Internal Model Isao Hayashi, Sayaka Kita, Masaki Ogino, and Jasmin Leveille

13:30-13:50 Does Representation of Outer Objects in Living Neuronal Network Synthesize "the Concept"?

Eri Shibata, Hidekatsu Ito, Wataru Minoshima, and Suguru N. Kudoh

13:50-14:10 Extraction and Investigation of Dominant Eye-Gaze Pattern in Train Driver's Visual Behavior Using Markov Cluster Algorithm

Yukio Horiguchi, Takaya Suzuki, Tetsuo Sawaragi, Hiroaki Nakanishi, and Tomoharu Takimoto

OS: Decoding and Control of Biological System (1)

Chair: Hidekatsu Ito (Kwansei Gakuin University, Japan)

14:10-14:30 Input-Output Transformation of a Neuronal Oscillator
Takanobu Yamanobe

14:30-14:50 Maximum Entropy Learning in Cultured Cortical Neural Networks
Takuya Isomura, Kiyoshi Kotani, and Yasuhiko Jimbo

[Sa6-2] OS: Social Implementation of Practical and Intelligent Systems (2)

Chair: Daisuke Kitakoshi (National Institute of Technology, Tokyo College, Japan)

13:10-13:30 Smart Device Interlocked Robot Partners for Information Support Systems in Sightseeing Guide Siqi Sun, Takahiro Takeda, Hisae Koyama, and Naoyuki Kubota

13:30-13:50 A Validity Analysis of a User Model Employed in a Research Activity Support System Daisuke Kitakoshi, Shunya Toda, and Masato Suzuki

13:50-14:10 Development of a Pedestrian Navigation System for the Visually Impaired with QZSS and RFID Akihiro Yamashita, Kei Sato, Syunta Sato, and Katsushi Matsubayashi

GS: Story Generation and Summarization

14:10-14:30 Multi-document Summarization by Creating Synthetic Document Vector Based on Language Model

Dahae Kim and Jee-Hyong Lee

14:30-14:50 Generate Causal Story Plots by Monte Carlo Tree Search Based on Common Sense Ontology Von-Wun Soo, Tai-Hsun Chen, and Chi-Mou Lee

[Sa7-2] GS: Kansei Engineering and Interface

Chair: Masataka Tokumaru (Kansai University, Japan)

13:10-13:30 A Moral Judgment System Using an Automatic Created Moral Corpus Masahiro Yamamoto and Masafumi Hagiwara

13:30-13:50 Analysis of Images of Streetscapes by Text Data and Comparison between Residents and Visitors

13:50-14:10	Music Recommendation System Improvement Using Distributed Genetic Algorithm				
	Masayoshi Inoue, Hiroshi Takenouchi, Masataka Tokumaru				
14:10-14:30	Interruption-Information Management Framework for Chat Interface				
	Shreejana Prajapati, Koichi Yamada, Muneyuki Unehara, and Izumi Suzuki				
14:30-14:50	Interactive Voice Generation System for Story Reading				
	Takehisa Onisawa and Kiriko Ogino				
14:50-15:05	Break				
15:05-16:05	Poster Session @ Poster Session Room, 6F				
Coordinator:	Hirosato Seki (Osaka University, Japan)				
Po-1	Large Graph Reconstruction Method for Fast Graph Analysis on Spark				
	Ryota Takei, Ayahiko Niimi				
Po-2	On Reward Function for Survival				
	Naoto Yoshida				
Po-3	Action Selection Using Each Task Priority: Realization of Asynchrony Action Selection and				
	Update Priorities				
	Takuya Masaki and Kentarou Kurashige				
Po-4	Rating-Scale Questionnaire Survey Analysis Using SOM-Based Nonlinear Tensor Decomposition				
	Hideaki Ishibashi, Tohru Iwasaki, Yohsuke Date, and Tetsuo Furukawa				
Po-5	Automatic Detection and Manual Analysis of Inadequate Descriptions in a Thesis				
	Takuma Okada, Masaki Murata, and Qing Ma				
Po-6	Application of Kansei Engineering and Analytic Network Process in the Thai Ceramic Design				
	Chaiwat Kittidecha and Koichi Yamada				
Po-7	Workings of the Brain in the Time Perception Using the Time Guessing Game				
	Ryosuke Hayasaka, Keita Mitani, and Yukinobu Hoshino				
Po-8	Discussion of Sensor Accuracy Introducing to Machine Learning with Model Car				
	Hisayuki Sasaoka				
Po-9	Withdrawn				
Po-10	A Quality Classification Model for Word of Mouth via a Content-Based Sentiment Lexicon				
	Chihli Hung and Rui-Jia Zhong				
Po-11	Mining Correlated Association Rules from Multi-Relational Data Using FCA				
	Masahiro Nagao and Hirohisa Seki				
Po-12	Writer Identification Using Skeleton-Based Shape Feature of Hand Holding a Pen				

Po-13 Feature Extraction of English Textbooks for Elementary School Children in Finland

Kohei Nomoto and Naruki Noguchi

Midori Tanaka and Mitsuru Nakai

Hiromi Ban, Haruhiko Kimura, and Takashi Oyabu

- Po-14 Walking Activity Estimation Method by Using Electrostatic Induction Koichi Kurita
- Po-15 Logics in Granular Computing

 Tuan-Fang Fan and Churn-Jung Liau
- Po-16 Object Detection Using Color Entropy-Based Fuzzy Classifier with Expanded Consequent Space Guo-Cyuan Chen, Chia-Feng Juang, and I-Fang Chung
- Po-17 Comparison of Water Quality Classification Models Using Artificial Neural Network and Bayesian Network
 - Dehiwala Liyanage, Chamara P. Liyanage, and Koichi Yamada
- Po-18 Analysis of Fundamental and Harmonic Frequency Components in Photic Driving Response Yuto Abe, Tadanori Fukami, Takamasa Shimada, and Fumito Ishikawa
- Po-19 Japanese Word Sense Disambiguation Using Paraphrasing and Machine Learning Yuma Toda, Masaki Murata, and Qing Ma
- Po-20 Visualizing States by Autoregressive Gaussian Process Dynamical Models Nobuhiko Yamaguchi
- Po-21 A Modification of Weighted k-Nearest Neighbor and Its Application to Land-Cover Classification with Remote-Sensing Image

 Ryosuke Kubota and Tatsuya Hayashi
- Po-22 High Quality 3D Color Imaging for Gesture Recognition
 Jing-Wein Wang, Tzu-Hsiung Chen, and Quynh Anh Vu
- Po-23 Effective Estimation Method of P300 and SSVEP in Hybrid BCI Ryota Mihira, Takuya Suzuki, Ryota Sawaki, Tadanori Fukami, and Fumito Ishikawa
- Po-24 A Hybrid Method of CT Algorithms Using Total Variation, Iterative FT and Support Construction Wisan Dhammatorn and Hiroyuki Shioya
- Po-25 Effects of Acoustical Noise on Selective Attention to Auditory Stimuli during Intellectual Task
 Takahiro Tamesue
- Po-26 Source Code Representation Using Statement Relation Long Short-Term Memory Networks
 Suah Kim and Jee-Hyong Lee
- Po-27 Feature Selection for On-line Signature Verification Using Dynamic Features Kotaro Nakano and Basabi Chakraborty
- Po-28 Adaptive Refocusing Algorithm Design Based on 3D Depth Image Yu-Cheng Fan and Wei-Syuan Chen

16:05-16:20 Break

16:20-18:00 Parallel Sessions

[Sa1-3] Invited Talk 5 (40-50 minutes Talk and about 10 minutes Discussion)

16:20-17:20 Visual Analysis and Representations of Type-2 Fuzzy Membership Functions

Prof. Frank Chung-Hoon Rhee (Hanyang University, Korea)

Chair: Young Im Cho (Gachon University, Korea)

[Sa2-3] OS: Human Symbolic Systems (2)

Chair: Tomohiro Yoshikawa (Nagoya University, Japan)

Co-Chair: Yoichiro Maeda (Institute of Technologists, Japan)

16:20-16:40 Gaze Instruction System Used Panoramic Expansion Image of Omnidirectional Camera Yoichiro Maeda and Kazuki Naruki

16:40-17:00 Power Assist Control Based on Motion Estimation of Wearer's Forearm Using Motion Sensor Katsuya Sahashi, Shinnosuke Nomura, Takuya Inoue, Yasutake Takahashi, Yoshiaki Taniai, and Masayuki Kawai

17:00-17:20 Verifying Effectiveness of a Handwriting Robot Using Onomatopoeia Kazuya Endo, Masayoshi Kanoh, and Tsuyoshi Nakamura

17:20-17:40 Adobe Illustrator Plug-in to Support Brush Selection Using Onomatopoeia Utterance
Gou Kayama, Masato Yoshiike, Yuri Yamada, Tsuyoshi Nakamura, Masayoshi Kanoh, and Koji
Yamada

OS: IoT Security and Its Application

17:40-18:00 Development of a Customized User Control of Digital Audio in a Smart Home Jung-Sook Kim

[Sa3-3] OS: Novel Media in Ubiquitous Virtual Reality

Chair: Choonsung Shin (KETI, Korea)

16:20-16:40 3D Printing Simulation Tool for Future 3D Printing Environment Choonsung Shin and Sang-Won Lee

16:40-17:00 Position and Force Sensitive N-Ary User Interface Framework for Wrist-worn Wearables
Hyoseok Yoon, Ji-Eun Lee, Se-Ho Park, and Kyung-Taek Lee

17:00-17:20 Survey on Interactive AR Book

Choonsung Shin, Sehwan Kim, and Youngho Lee

GS: Modeling and Simulation

17:20-17:40 Comparative Experiments on Models for Automatic Baseball Video Tagging Komei Arasawa and Shun Hattori

[Sa4-3] OS: Clustering (3)

Chair: Yasunori Endo (University of Tsukuba, Japan)

16:20-16:40 A Study on Recommendation Ability in Collaborative Filtering by Fuzzy Co-Clustering with Exclusive Item Partition

Takaya Nakano, Katsuhiro Honda, Seiki Ubukata, and Akira Notsu

16:40-17:00 Cluster Validation in Multinomial Mixtures-Induced Fuzzy Co-Clustering

	Katsuhiro Honda, Yurina Suzuki, Seiki Ubukata, and Akira Notsu
17:00-17:20	A Noise Fuzzy Co-clustering Scheme in MMMs-Induced Clustering
	Katsuhiro Honda, Nami Yamamoto, Seiki Ubukata, and Akira Notsu
GS: Pattern I	Recognition
17:20-17:40	Approximate Determination of q-Parameter for FCM with Tsallis Entropy Maximization
	Makoto Yasuda
17:40-18:00	Reversible Data Hiding with Prediction-Based Multi-Bit Embedding and Multi-Level Difference
	Alteration
	Hsiang-Cheh Huang, Feng-Cheng Chang, and Yuh-Yih Lu
[CaF 2] OC: I	Decedies and Central of Rielegical Crotom (2)
-	Decoding and Control of Biological System (2)
	atsu Ito (Kwansei Gakuin University, Japan)
16:20-16:40	Development of Gait Assistive Device Using Pneumatic Artificial Muscle
40 40 47 00	Yusuke Hashimoto, Yasutaka Nakanishi, Norihiko Saga, Jun-ya Nagase, and Toshiyuki Satoh
16:40-17:00	Attempt on the Extraction of EEG Using the ECG at the Time of Walking and Stepping Motion
	Kikuo Fujimura and Syohei Okazaki
17:00-17:20	Development of Wearable Force Plate
	Ken Oi, Yasutaka Nakanishi, Norihiko Saga, and Kunio Shimada
17:20-17:40	Comparison of Prefrontal Activity Evoked by Limbic Movement, Motor Imagery and Transcranial
	Magnetic Stimulation (TMS)
	Sayaka Morishita, Hidekatsu Ito, and Suguru N. Kudoh
17:40-18:00	Relationships between Stimulus Interval and Changes of Firing Properties
	Hidekatsu Ito, Wataru Minoshima, and Suguru N. Kudoh
[Sa6-3] OS: I	Intelligent Smart City
Chair: Young	Im Cho (Gachon University, Korea)
Jung-	Sook Kim (Kimpo University, Korea)
16:20-16:40	Stixel-Based Stereo Vision for Real-time ADAS
	Taekang Woo, SeungSoo Kim, Hyoungrae Kim, Eunsoo Park, and Hale Kim
16:40-17:00	Intelligent Unmanned Aerial Vehicle Platform for Smart Cities
	Andrey Giyenko and Young Im Cho

17:00-17:20 Development of Reporting Tool for Supporting Language Disorder Diagnosis
 Moonsoo Chang, Tae-kyoon Choi, and Min-ho Yoo
 17:20-17:40 Smart Grid Framework Test Bed Using OPNET and Power Line Communication

Bishnu P. Gautam, Hiroyasu Asami, Amit Batajoo, and Tatsuya Fujisaki

GS: Smart City

Jun-Ho Huh and Kyungryong Seo 17:40-18:00 Regional Revival through IoT Enabled Smart Tourism Process Framework (STPF): A Proposal

- [Sa7-3] OS: Synthesis of Computational Intelligence Technologies and Methodological Design
- Chair: Kisung Seo (Seokyeong University, Korea)
- Co-Chair: Wei Huang (Tianjin University of Technology, P.R. China)
- 16:20-16:40 Design of Classification of Black Plastics Based on Fuzzy Radial Basis Function Neural Networks
 Using Raman Spectroscopy
 Jong-Soo Bae, Sung-Kwun Oh, and Eun Ok Kim
- 16:40-17:00 Design of Face Recognition System Realized with the Aid of PCA-based RBFNN Sun-Hawn Kim, Sung-Kwun Oh, and Jin-Yul Kim
- 17:00-17:20 Design of Interval Type-2 FCM-based Neural Networks
 Wook-Dong Kim, Sung-Kwun Oh, and Kisung Seo
- 17:20-17:40 Design of Radial Basis Function Neural Networks with Principal Component Analysis and Linear Discriminant Analysis for Black Plastic Identification

 Seok-Beom Roh, Sung-Kwun Oh, Eun Kyu Park, and Woo Zin Choi
- 17:40-18:00 Polynomial Neural Network Classifiers Based on Data Preprocessing and Space Search
 Optimization
 Wei Huang, Sung-Kwun Oh, and Witold Pedrycz

August 28, 2016 (Sun)

8:40-9:40 Plenary Talk 4 (Chair: Yasuo Kudo (Muroran Institute of Technology, Japan))

Cloud Based Intelligent Robotics

Prof. Peter Sinčák

(Technical University of Kosice, Slovakia)

9:40-10:00 Break

10:00-11:00 Parallel Sessions

[Su2-1] OS: Practical Applications of Intelligent Systems (1)

Chair: Keon Myung Lee (Chungbuk National University, Korea)

10:00-10:20 Intuitionistic Fuzzy Approximation Spaces Induced by Intuitionistic Fuzzy Topologies

Sang Min Yun and Seok Jong Lee

10:20-10:40 Fast Generative Approach Based on Sparse Representation for Visual Tracking Suryo Adhi Wibowo, Hansoo Lee, Eun Kyeong Kim, and Sungshin Kim

[Su3-1] OS: Interactive Systems (1)

Chair: Makoto Fukumoto (Fukuoka Institute of Technology, Japan)

10:00-10:20 Interactive Projection System that Always Presents Information within User's View Jun-ichi Imai, Ryota Kobayashi, Kazuya Jinjo, Hirobumi Suzuki, Kazuto Kameda, Shohei Koshikawa, and Seiya Takihara

10:20-10:40 Development of a Breathing Detection Robot for a Monitoring System

Tsukasa Ushijima and Junji Satake

10:40-11:00 Calibrating Screen Coordinates of Tabletop Display Using a Shadow Cursor and its Properties Makio Ishihara and Yukio Ishihara

[Su4-1] OS: Fuzzy Intelligent Systems (1)

Chair: Chin-Wang Tao (National Ilan University, Taiwan)

10:00-10:20 Design and Implementation of a Interval Type-2 Adaptive Fuzzy Controller for a Novel Pneumatic Active Suspension System

Yi-Hsun Lo, Rui-Peng Chen, Lian Wang Lee, I-Hsum Li, and Ya-Dung Pan

10:20-10:40 A Novel Approach for Linear Interval Regression Models with Fuzzy Weights

Jin-Tsong Jeng, Chih-Ching Hsiao, Chen-Chia Chuang, Chih-Wen Li, Chen-Xiang Zhang, and
Chih-Chi Lin

10:40-11:00 Chaos Synchronization Using Brain-Emotional-Learning-Based Fuzzy Control Chun-Fei Hsu, Chien-Ting Su, and Tsu-Tian Lee

[Su5-1] OS: Advanced Biomedical Engineering

Chair: Kouki Nagamune (Fukui University, Japan)

Co-Chair: Syoji Kobashi (University of Hyogo, Japan)

10:00-10:20 Filtering Effects for Image Data Types in Image Analysis Using Subspace Classifier Nobuo Matsuda, Fumiaki Tajima, and Hldeaki Sato

10:20-10:40 A Development of Evaluation System for Pelvic Belt by Using Force Sensor Kouki Nagamune and Keisuke Oe

10:40-11:00 Implanted Knee Kinematics Analysis by 2-D/3-D Registration Using Particle Filter

Kento Morita, Manabu Nii, Fumiaki Imamura, Takatoshi Morooka, Shinichi Yoshiya, and Syoji

Kobashi

[Su6-1] OS: Intelligent Sensors and Its Application

Chair: Suk-seung Hwang (Chosun University, Korea)

10:00-10:20 Preliminary Study for Biometric Based on Gait Pattern Analysis Using Insole-Type Force Sensor Hangsik Shin

10:20-10:40 Development of RFID Reader and BLE Module for Pole Management using Smart Phone Jaepyoung Kim, Youngchul Bae, and Young Woo Shon

10:40-11:00 Approximation-Free Observer for Underactuated Surface Vessels
Bong Seok Park

11:00-11:20 Break

11:20-12:20 Parallel Sessions

[Su2-2] OS: Practical Applications of Intelligent Systems (2)

Chair: Kyung Mi Lee (Sungkyunkwan University, Korea)

11:20-11:40 Recurrent Neural Network for Storytelling
YunSeok Choi, Suah Kim, and Jee-Hyong Lee

11:40-12:00 Collective Matrix Factorization Using Tag Embedding for Effective Recommender System Hanbyul Bang and Jee-Hyong Lee

 12:00-12:20 Analysis on Toddlers' Mean Length of Utterance and Type-Token Ratio by their Gender and Maternal Conversational Style
 Miyoung Sung, Young-Eun Chang, and Moon-Soo Chang

[Su3-2] OS: Interactive Systems (2)

Chair: Jun-ichi Imai (Chiba Institute of Technology, Japan)

11:20-11:40 Do You Follow Angel Agent's Advice? A Pilot Study for Decision Making Support by Multiple Animated Agents

Masahide Yuasa

11:40-12:00 Performance Evaluation of a Kansei Retrieval Agent Model with Neural Networks
Hiroshi Takenouchi and Masataka Tokumaru

12:00-12:20 Creation of Warning Sound by Vote of Multiple Users Based on Interactive Differential Evolution:

Discussion toward Effective IECs Creating of Media Contents Suited

Makoto Fukumoto

[Su4-2] OS: Fuzzy Intelligent Systems (2)

Chair: Chin-Wang Tao (National Ilan University, Taiwan)

11:20-11:40 iOS-Based People Detection of Multi-Object Detection System
Ze-Si Huang, Chen-Chia Chuang, Chin-Wang Tao, Min-Yeh Hsieh, Chen-Xiang Zhang and
Chia-Wen Chang

11:40-12:00 A Novel Steering Control via Gravity Position: Vehicle Control by Driver's Seat Chung-Neng Huang, Jenn-Kun Kuo, and Chen-Chia Chuang

12:00-12:20 SoPC-Based Evolutionary BFO Computing and Its Application to Tracking Control of Mecanum Mobile Robots

Hsu-Chih Huang, Chin-Wang Tao, Chang-Han Wu, and Jin-Tsong Jeng

12:20-12:40 Obstacle Avoidance Path Design of Wheeled Mobile Robot
Chin-Chi Chiu, Wei-Jen Chen, Mei-Yung Chen

[Su5-2] OS: New Generation Computing Paradigm

Chair: Kei Ohnishi (Kyushu Institute of Technology, Japan)

Co-Chair: Akihiro Fujiwara (Kyushu Institute of Technology, Japan)

11:20-11:40 A Generation Gap Model for a Human-Based Evolutionary Algorithm Using a Tag Cloud Masatomo Azumaya and Kei Ohnishi

11:40-12:00 Solving Subset Sum Problem Using EN P System with Active Membranes
Tomohiro Shiiba and Akihiro Fujiwara

12:00-12:20 Experimental Evaluation of Approximation Algorithms for Maximum Distance-Bounded Subgraph Problems

Yuichi Asahiro, Tomohiro Kubo, and Eiji Miyano

Table of Plenary and Invited Talks

Plenary Talks Chair: Takahiro Yamanoi August 26 (Fri) 9:20-10:20 Prof. Michel Grabisch: **Multicriteria Decision Making with Interacting Criteria** August 26 (Fri) 13:10-14:10 Chair: Byung-Jae Choi Prof. Seong G. Kong: **Machine Learning for Computer Vision** August 27 (Sat) 9:00-10:00 **Chair: Takahiro Yamanoi** Dr. Kazuo Iwano: Reality 2.0 and Wisdom Computing – Our Vision Toward the **Future** August 28 (Sun) 8:40-9:40 Chair: Yasuo Kudo Prof. Peter Sinčák: **Cloud Based Intelligent Robotics**

Invited Talks

August 26 (Fri) 14:30-15:30 Chair: Toshihiko Watanabe

Prof. Takehisa Onisawa: Interactive Design Support System Using Kansei Information

August 26 (Fri) 16:30-17:30 Chair: Masahiro Inuiguchi

Prof. Motohide Umano: Dynamic Fuzzy Q-learning with Forgetting Facility

August 27 (Sat) 10:20-11:20 Chair: Jung Sik Jeong

Dr. Sang Wan Lee: Brain-inspired Artificial Intelligence: Model-based and

Model-free Control

August 27 (Sat) 13:10-14:10 Chair: Syoji Kobashi

Prof. Min-sung Koh: (Multivariate) Empirical Mode Decomposition Filter Banks and

a Quintet Singular Value Decomposition

August 27 (Sat) 16:20-17:20 Chair: Young Im Cho

Prof. Frank Chung-Hoon Rhe: Visual Analysis and Representations of Type-2 Fuzzy

Membership Functions

Table of the Chairpersons of OS & GS

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August 26 (Fri) 10:40-12:00								
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August 28 (Sun) 10:00-11:00								
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			Kei Ohnishi					

We thank all the chairpersons for their kind cooperation and efforts.