

March 15 Saturday

March 15 Saturday	ROOM A	No.	CONTENTS
9.00 - 10.00	Registration		
10.00-10.10	Opening		
10.10 - 11.00	Tutorial Chair J. Watada	T3	"Swarm Intelligence" Dr. Jeng-Shyang Pan
11.00 - 11.20	Coffee Break		
11.20-12.20	Session 1A (Decision Making) Chair Niskanen, Vesa	R01	"Industrial Portfolio and Innovation Policy of Taiwan's CNC Machine Tool Industry" Pin-Ching Lee, Chia-Han Yang, Joseph Z. Shu
		R02	"A Critical Look at the Optimal Portfolio Model in the Revised Activation Law" Toshihiko Gima
		R03	"Exceptional Families of Elements and Solvability of Implicit Complementarity Problems" Vyacheslav V. Kalashnikov, Gerardo A. Perez-Valdes & Nataliya I. Kalashnykova
12:20-14:00	Lunch		
14:00-15:00	Session 2A (Management Of Technology) Chair Choi, Jaeseok	R13	"A New Model of Knowledge Spiral in the Platform of Innovation Intermediary" Chia-Han Yang, Jou-Chen Chen and Joseph Z. Shyu
		R14	"Characteristics of Patent Information in Breakthrough Inventions" Eugene Hsiao & Junzo Watada
		R15	"Flexible product mix problem considering the occurrence of accident in the production process" Takashi Hasuike, Hiroaki Ishii
15:00-15:10	Coffee Break		
15:10 - 16.00	Keynote Speech Chair J. Watada	T1	"Future House in Ubiquitous Computing Society" Dr. Junji Nomura
16:10-16:30	Moving to Banquet Place		
17:00-19:00	Banquet		
20:00	Return		

March 15 Saturday	ROOM B	No.	CONTENTS
9.00-10.00	Registration		
10.00-10.10	ROOM A		
10.10-11.00	ROOM A		
11.00-11.20	Coffee Break		
11.20-12.20	Session 1B (Scheduling 1) Chair Pan, Jeng-Shyang	R04	"Study for Two-stage Transportation Planning with Inventory and Exclusionary Side Constraints by Genetic Algorithm" Shinichiro Ataka & Mitsuo Gen
		R05	"Hybrid Genetic Algorithm for a multi-stage Reverse Logistics Network Design Problem" Jeong-Eun Lee, Mitsuo Gen & Kvang-Gu Rhee
		R06	"Yard Crane Scheduling in Container Terminal by Evolutionary Algorithm" Yang Yang & Mitsuo Gen
12:20-14:00	Lunch		
14:00-15:00	Session 2B (Soft Computing 2) Chair Lin, Lily	R16	"Proposal and Validity of the Merchandise Planning Business Model, "A-POST"" Mari Nakamura, Masato Kuniyoshi, Manabu Yamaji, Kakuro Amasaka
		R17	"Developing a strategic advertisement method "VUCMIN" to enhance the desire of customers for visiting dealers" M. Murat Sakalsiz, Satoru Hifumi, Manabu Yamaji, Kakuro Amasaka
		R18	"Demonstrative Verification Study for the Next Generation Production Model, "Advanced Toyota Production System"" Hirohisa Sakai, Kakuro Amasaka
15:00-15:10	Coffee Break		
15:10 - 16.00	ROOM A		
16:10-16:30	Moving to Banquet Place		
17:00-19:00	Banquet		
20:00	Return		

March 16 Sunday

March 16 Sunday	ROOM A	No.	CONTENTS
9.00 -09.50	Tutorial Chair J. Watada	T4	"Soft Computing Methods in Human Sciences - a Meta Level Approach" Dr. Vesa A. Niskanen
09:50 - 10:10	Coffee Break		
10:10-11:10	Invited S1A (Forecasting) Chair Liu, Weiping	101	"Representation of the Time Series of Chaos by the Probability Matrix and its Medical Application" Seizaburo Arita, Masaharu Tanemura
		102	"Forecasting Exchange Rate Change between USD and JPY by Using Dynamic Adaptive Neuron-Fuzzy Logic System" Weiping Liu
11:10-13:10	Lunch		
13:10 - 14:10	Special Lecture Chair J. Watada	T2	"Technology Management in the Knowledge Era" Dr. Dundar Kocaoglu
14:10 - 14:30	Coffee Break		

March 16 Sunday	ROOM B	No.	CONTENTS
9.00 -09.50	ROOM A		
09:50 - 10:10	Coffee Break		
10:10-11:10	Invited S1B (Assignment) Chair Shamshul Bahar Yaakob	103	"How to Guarantee Fair Share to Everybody" Milan Vlach
		104	"Competitive Assignment Problem" Hiroaki Ishii and Yung Lung Lee
11:10-13:10	Lunch		
13:10 - 14:10	ROOM A		
14:10 - 14:30	Coffee Break		

March 15 Saturday

March 15 Saturday	ROOM C	No.	CONTENTS
9.00-10.00	Registration		
10.00-10.10	ROOM A		
10.10-11.00	ROOM A		
11.00-11.20	Coffee Break		
11.20-12.20	Session 1C (Soft Computing 1) Chair Lin, Lin	R07	"A Novel Vector Quantization Circuit Employing Rough-Winner-Take-All Self-Organizing Neural Network Implemented on Hardware/Software Complex System" Keiji Kudo, Hataru Tamukoh, Takanori Koga, Rika Sato, Masatoshi Sekine, Takeshi Yamakawa
		R08	"Evaluation of Prediction Capability of Neuron Networks Used for Electrocardiogram" Shunsuke Kobayakawa, Takafumi Fujii, Hirokazu Yokoi
		R09	"Classification of Images Based on Fuzzy Similarity Analysis" Gancho Vachkov
12.20-14.00	Lunch		
14.00-15.00	Session 2C (Operational Research 3) Chair Jeng, Don Jyh-Fu	R19	"Criteria for Judging Consistency of a Subject's Answers in Paired Comparison" Taki Kanda
		R20	"Bilevel Toll Setting Problem: Dynamic Programming Algorithm" Fernando Camacho & Nataliya Kalashnykova
		R21	"The method to choose each candidate by each group according voters' purposes" Hiroshi Noguchi, Kanae Noguchi, Hiroaki Ishii
15.00-15.10	Coffee Break		
15:10 - 16.00	ROOM A		
16:10-16:30	Moving to Banquet Place		
17:00-19:00	Banquet		
20:00	Return		

March 15 Saturday	ROOM D	No.	CONTENTS
9.00-10.00	Registration		
10.00-10.10	ROOM A		
10.10-11.00	ROOM A		
11.00-11.20	Coffee Break		
11.20-12.20	Session 1D (Operational Research 1) Chair Lee, Huey-Ming	R10	"Rough sets theory and its applications to management engineering" Che-Wei Lin, Junzo Watada & Gwo-Hshiung Tzeng
		R11	"Semiconductor Market Fluctuation Indicators and Rules Derivations by Using the Rough Set Theory" Chi-Yo Huang, Gwo-Hshiung Tzeng, Hong-Chun Wu
		R12	"Weight fuzzy set for facility site selection model" Lily Lin, Shu-Yen Lee, Tsung-Yen Lee, Huey-Ming Lee
12:20-14:00	Lunch		
14:00-15:00	Session 2D (Soft Computing 3) Chair Kaino, Toshihiro	R22	"Conditions for Dynamic Alliance Formation of Service Industry" Jing Wang, Yunfu Huo & Keyi Wang
		R23	"A Method for Creating Buying Behavior of Customer by Kansei Information Design" Yuji Kosaka and Hisao Shiizuka
		R24	"Management System to support the maintenance engineering in the public water supply systems" Rui F. M. Marçal, Flavio Trojan, Kazuo Hatakeyama
15:00-15:10	Coffee Break		
15:10 - 16.00	ROOM A		
16:10-16:30	Moving to Banquet Place		
17:00-19:00	Banquet		
20:00	Return		

March 16 Sunday

March 16 Sunday	ROOM C	No.	CONTENTS
9.00 -09.50	ROOM A		
09:50 - 10:10	Coffee Break		
10:10-11:10	Invited S1C (Clustering) Chair Sadaaki Miyamoto	105	"Fuzzy Cluster Covariance Based Analysis for Interval-Valued Data" Mika Sato-Ilic
		106	"Fuzzy Bags: Theory and Applications toward a Model of Uncertainty and Clustering" Sadaaki Miyamoto
11:10-13:10	Lunch		
13:10 - 14:10	ROOM A		
14:10 - 14:30	Coffee Break		



March 16 Sunday

March 16 Sunday	ROOM A	No.	CONTENTS
14:30-15:30	Session 3A (Robot) Chair Kalashnikov, Vyacheslav V.	R25	"Speaker Emotion Inference Module and its Application to Mascot Robot System" Yukiko Uehara, Yoichi Yamazaki, Yuta Masuda, Hai An Vu, Kazuya Fukuda, Yui Matsuura, Phuc Quang Le, M. Skander Hannachi, Fangyan Dong, Yasufumi Takama, Kaoru Hirota
		R26	"Tracking System for Human Motions in an Outdoor Environment" Zalili Binti Musa & Junzo Watada
		R27	"A Speckle Noise Reduction Method based on Adaptive Multi level Thresholding by using Speckle Noisy US image modeling" Jaesik KIM, Toshihiro NISHIMURA
15:30-15:50	Coffee Break		
15:50-16:50	Session 4A (Power Systems) Chair Sato-Illic, Mika	R34	"Area Outage Cost Assessment in Korea Power System By Using TRELSS" Bo Shi, Jeongje Park, Jaeseok Choi, Junmin Cha, Yongbum Yun, A.(Rahim) A. El-Keib and Mohammad Shahidehpour
		R35	"Best Generation Mix for Korea Power System Using Fuzzy Linear Programming – 2030 Vision" Jeongje Park, Sangheon Jeong, Jaeseok Choi, Junmin Cha, Jinu Kim and Yusu Lee
		R36	"Structural Learning of Boltzmann Machine: An Application" Shamshul Bahar Yaakob & Junzo Watada
16:50-17:10	Coffee Break		
17:10-18:10	Session 5A (Operational Research 2) Chair Nishimura, Toshihiro	R43	"Evidential Reasoning Evaluation of Structural Relation" Rozlini Mohamed & Junzo Watada
		R44	"A VIKOR Technique combined with DEMATEL and ANP with Applications" Yu-Ping Ou Yang, How-Ming Shieh, Gwo-Hshiung Tzeng
		R45	"Comparison Between the DEMATEL Methods and Fuzzy Decision Maps –A Sensitive Analysis Approach" Wen-Hsien Chen, Rachung Yu, Gwo-Hshiung Tzeng

March 16 Sunday	ROOM B	No.	CONTENTS
14:30-15:30	Session 3B (Optimization) Chair Vlach, Milan	R28	"A Fuzzy Optimal Selection Method Based on Information Granulation Entropy" Guoquan Zhang, Wenli Li
		R29	"Optimization of Player's Discrete Choice for Game Dynamics in Unknown Environment" Koji Okuhara, Hiroaki Ishii, Yung Lung Lee, Haruhiro Fujita
		R30	"L-R Style Fuzzy Random Renewal Process with A Queueing Application" Wang Shuming & Junzo Watada
15:30-15:50	Coffee Break		
15:50-16:50	Session 4B (Logic Approach) Chair Vachkov, Gancho	R37	"Fuzzy Rule-Based Strategy in Measuring the Effectiveness of Technology Transfer – A Study on Taiwan's Machinery Industry" Wen-Hsiang Lai, Chien-Tzu Tsai, Ya-Ting Su
		R38	"Expert System based on Fuzzy rules for Planning the Maintenance in equipment on Manufacture Processes" Rui F. M. Marçal, Flavio Trojan, Kazuo Hatakeyama
		R39	"Half-Negation Pulse Logic Implemented on Hardware/Software Complex System" Keiji Kudo, Hataru Tamukoh, Rika Sato, Masatoshi Sekine
16:50-17:10	Coffee Break		
17:10-18:10	Session 5B (Operational Research 3) Chair Ishii, Hiroaki	R46	"Algorithm for Searching Dither Matrices with Smallest Discrepancy" Shunichi Tamura and Shao-Chin Sung
		R47	"A Real Options Approach to Evaluate Exposure Risk in Investment" Song Wen and Junzo Watada
		R48	"General model to build optimal multi-objective expansion model of competence sets for development choosing of knowledge workers" Chen-Chun Lin, Joseph Z. Shyu, Gwo-Hshiung Tzeng

March 17 Monday


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9:00 -09:50	Tutorial Chair M. Vlach	T5	"Learning Behaviors of Automata Operating in an Unknown Nonstationary Environment" Dr. Norio Baba
09:50-10:10	Coffee Break		
10:10-11:10	Session 6A (DNA Computing) Chair Sung, Shao-Chin	R49	"A Survey on DNA Computing: Methodology and Applications" Rohani Abu Bakar & Junzo Watada
		R50	"Fuzzy DNA-Based Computing for Analyzing Complicated Personnel Networks" Ikno Kim, Don Jyh-Fu Jeng and Junzo Watada
		R51	"Bio-inspired Forecasting Procedure for Nonlinear Time Series" Don Jyh-Fu Jeng, Junzo Watada and Berlin Wu
11:10-11:30	Coffee Break		
11:30-12:30	Invited S2A (Soft Computing) Chair Baba, Norio	I07	"Evaluation at a small building with Mutual Complement Network by Wired and Wireless" Kunihiro Yamada, Takashi Furumura, Kakeru Kimura, Hiroaki Yuki
		I08	"Topological Map Building Based on A Genetic Algorithm for Simultaneous Localization and Mapping" Hironobu Sasaki, Naoyuki Kubota, Kazuhiko Taniguchi
12:30-12:50	Closing & Awarding Student Hall		


March 17 Monday	ROOM B	No.	CONTENTS
9:00 -09:50	 ROOM A		
09:50-10:10	Coffee Break		
10:10-11:10	Session 6B (Business) Chair Takeda, Fumiaki	R52	"A Multivariant Approach to Business Analysis of Leisure Industry" Yuji Fukuyama & Junzo Watada
		R53	"IBM as a Management System" Shinya Imai & Junzo Watada
		R54	"Market Conditions of VoIP Services in Taiwan" You-Hsin Tsai & Junzo Watada
11:10-11:30	Coffee Break		
11:30-12:30	Invited S2B (Econometrics) Chair Shinya Imai	I09	"Path Identification of FDI and Financial Expenditure in China" Bing Xu, Junzo Watada
		I10	
12:30-12:50	 Student Hall		

March 16 Sunday

March 16 Sunday	ROOM C	No.	CONTENTS
14:30-15:30	Session 3C (Industry) Chair Miyamoto, Sadaaki	R31	"Valuation of Pharmaceutical R&D Project Using Real Options Approach" Minyan Zhu & Junzo Watada
		R32	"Analysis of Taiwan's biotechnology industry by using rough sets theory" Min-Hsiu Tsai, Che-Wei Lin & Junzo Watada
		R33	"A Semantic Web Approach to Extract Accident Reasons" Jianxiong Yang, Junzo Watada
15:30-15:50	Coffee Break		
15:50-16:50	Session 4C (Kansei Engineering) Chair Shi, Yan	R40	"Ichyou Tree InnoValue Model: A Conceptual Model of Wabi-Sabi Design for Traditional Japanese Ceramics" Lee-Chuan Lin, Junzo Watada
		R41	"The Principles of Louis Vuitton —The Strongest Brand Strategy" Shin'ya Nagasawa
		R42	"Kansei Management" Toshihiro Kaino
16:50-17:10	Coffee Break		

March 17 Monday

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9:00 -09:50	 ROOM A		
09:50-10:10	Coffee Break		
10:10-11:10	Session 6C (Schedulling 2) Chair Hu, Xiangpei	R55	"GIS-based Isoline-Generation in Urban Distribution Decisions" Yan Fang, Xiangpei Hu, Lijun Sun, Minfang Huang
		R56	"Fuzzy MADM for Synergic Knowledge Innovation in the Supply Chain Based on Theory of Constraints" Lindu Zhao, Bing Wu, Shicai Yang
11:10-11:30	Coffee Break		

12:30-12:50	 Student Hall		
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Excellent Paper Award

- (1) Weiping Liu
"Forecasting Exchange Rate Change between USD and JPY by Using Dynamic Adaptive Neuron-Fuzzy Logic System"
- (2) Hiroaki Ishii and Yung Lung Lee
"Competitive Assigment Problem"
- (3) Rui F. M. Marçal, Flavio Trojan, Kazuo Hatakeyama
"Expert System based on Fuzzy rules for Planning the Maintenance in equipment on Manufacture Processes"
- (4) Keiji Kudo, Hataru Tamukoh, Rika Sato, Masatoshi Sekine
"Half-Negation Pulse Logic Implemented on Hardware/Software Complex System"
- (5) Shunichi Tamura and Shao-Chin Sung
"Algorithm for Searching Dither Matrices with Smallest Discrepancy"
- (6) Hironobu Sasaki, Naoyuki Kubota, Kazuhiko Taniguchi
"Topological Map Building Based on A Genetic Algorithm for Simultaneous Localization and Mapping"

Excellent Student Paper Award

- (1) Shinichiro Ataka
"Study for Two-stage Transportation Planning with Inventory and Exclusionary Side Constraints by Genetic Algorithm"
- (2) Takashi Hasuike,
"Flexible product mix problem considering the occurrence of accident in the production process"
- (3) Hirohisa Sakai,
"Demonstrative Verification Study for the Next Generation Product"
- (4) Yuji Kosaka
"A Method for Creating Buying Behavior of Customer by Kansei In"
- (5) Wang Shuming
"L-R Style Fuzzy Random Renewal Process with A Queueing Appl"
- (6) Jeongje Park
"Best Generation Mix for Korea Power System Using Fuzzy Linear"
- (7) Rachung Yu,
"Comparison Between the DEMATEL Methods and Fuzzy Decisioi"