

**Intelligent Decision Technologies and
Intelligent Interactive Multimedia Systems and Services
2010 International Conferences**

All Activities will take place at the Pier 5 Hotel

Wednesday July 28

Registration 4-7pm

Welcome reception 7-9pm

| Thursday July 29 Room: Harborwest A-B (IDT) | Thursday July 29 Room: Harborwest C (IDT) | Thursday July 29 Room: Harboreast E (IIMSS) |
|---|---|--|
| Opening Ceremony 9-9:30 Keynote Speaker 9:30-10:30 Gheorghe Tecuci | | |
| Coffee Break 10:30-11 | Coffee Break 10:30-11 | Coffee Break 10:30-11 |
| Decision Making Theory (Part 1) 11-12:30 Chair: Eizo Kinoshita | Intelligent Spatial Decision Analysis (part 1) 11-12:30 Chair: Beniamino Murgante | Pervasive Systems for Healthcare 11-12:30 Chair: Giuseppe De Pietro |
| Lunch: Harboreast D 12:30-1:30 | Lunch Harboreast D 12:30-1:30 | Lunch Harboreast D 12:30-1:30 |
| Decision Making Theory (Part 2) 1:30-3:30 Chair: Eizo Kinoshita | Intelligent Spatial Decision Analysis (part 2) 1:30-3:30 Chair: Beniamino Murgante | International Workshop on Interactive Multimodal Environment 1:30-3:30 Chair: Marco Anisetti |
| Coffee Break 3:30-4 | Coffee Break 3:30-4 | Coffee Break 3:30-4 |
| Using Intelligent Systems for Decision Support in Health Systems 4-6pm Chair: Anne Snowdon | Future Direction of Innovative Decision Technologies 4-6pm Chair: Junzo Watada | Intelligent Healthcare Information Management 4:00-6:30 Chair: Nilesh Patel |
| Gala Dinner: Harbor club 7:00-9:00pm | Gala Dinner: Harbor club 7:00-9:00pm | Gala Dinner: Harbor club 7:00-9:00pm |

| Friday July 30 Room: Harborwest A-B (IDT) | Friday July 30 Room: Harborwest C (IDT) | Friday July 30 Room: Harboreast E (IIMSS) |
|---|---|---|
| Keynote Speaker 9:00-10:00 Jens Pohl | | |
| Coffee Break 10-10:30 | Coffee Break 10-10:30 | Coffee Break 10-10:30 |
| Kansei Communication and Value Creation in Human Mind 10:30-12:30 Chair: Hisao Shiizuka | Intelligent Decision Tech. in Accounting and Finance 10:30-11:30 Chair: Lois Tang Soft Data Analysis based Fuzzy Systems, Control and Decision Making 11:30-12:30 Chair: Mika Sato-Ilic | Human-Computer Interaction in Knowledge-based Environments (Part I) 10:30-12.30 Chair: George A. Tsihrintzis and Maria Virvou |
| Lunch: Harboreast D 12:30-1:30 | Lunch: Harboreast D 12:30-1:30 | Lunch: Harboreast D 12:30-1:30 |
| Service-oriented Innovation for Designing Intelligent Environment 1:30-4:00 Chair: Toyohide Watanabe | E-commerce and Logistics Management 1:30-4:00 Chair: Xiangpei Hu | Human-Computer Interaction in Knowledge-based Environments (Part II) 1:30-4:00 Chair: George A. Tsihrintzis and Maria Virvou |
| Coffee Break 4:00-4:30 | Coffee Break 4:00-4:30 | Coffee Break 4:00-4:30 |
| Applying Intelligent Decision Technology 4:30-6:30 Chair: Takashi Watanabe | Advances in Intelligent Decision Systems 4:30-5:30 Chair: Bala Balachandran Optimization-based Intelligent Techniques in Image Proc. 5:30-6:30 Chair: Robert Cierniak | Human-Computer Interaction in Knowledge-based Environments (Part III) 4:30-16.30 Chair: George A. Tsihrintzis and Maria Virvou |
| Closing Ceremony 6:30-7pm Harborwest A-B | | |

Detailed Schedule

Schedule for Conference (All activities will take place at Pier 5 Hotel)

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| Wednesday July 28 |
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| | | |
|---------|--------------|----------|
| 4pm-6pm | Registration | (Atrium) |
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| 6pm-8pm | Welcome Reception | |
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| Thursday July 29 |
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|---------|--------------|----------|
| 7am-4pm | Registration | (Atrium) |
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Harborwest A-B

9:00-9:30 am Welcome:

Dr. Karyl Leggio, Dean of the Sellinger School of Business and Management, Loyola University Maryland

Dr. Robert Howlett, Executive Director, KES International

Dr. Lakhmi Jain, Founding Director, KES International

9:30-10:30am Plenary

Intelligence Analysis as Agent Assisted Discovery of Evidence, Hypotheses and Arguments

Gheorghe Tecuci, David Schum, Mihai Boicu, Dorin Marcu, Benjamin Hamilton

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| 10:30-11am | Break | |
|------------|-------|--|

11-12:30pm Room: Harborwest A-B

Decision Making Theory (Part 1)

Session Chair: Eizo Kinoshita

Issues In Aggregating AHP/ANP Scales

William Wedley

An Application of Dominant Method: Empirical Approach to Public Sector Reform

Yuji Sato

General Applicability of a Decision Support Framework for Software Testing Using Artificial Intelligence Techniques

Deane Larkman, Masoud Mohammadian, Bala Balachandran, Ric Jentsch

A Double-Shell Design Approach for Multi-objective Optimal Design of Microgrids

Eleonora Riva Sanseverino, Maria (L) Di Silvestre, Giuseppe Fileccia Scimemi, Mariano (G) Ippolito, Gaetano Zizzo

A Comparison of Dominant AHP/CCM and AHP/ANP

Eizo Kinoshita

11-12:30pm Room: Harborwest C

Intelligent Spatial Decision Analysis (Part 1)

Session Chair: Beniamino Murgante

Analysis of fuzzyness in spatial variation of real estate market: some italian case studies
Carmelo Torre, Claudia Mariano

Assessing macroseismic data reliability through Rough Set Theory: application on Vulture area (Basilicata, southern Italy)

Lucia Tilio, Fabrizio Gizzi, Nicola Masini, Cinzia Zotta, Maria Danese, Beniamino Murgante

Fire Data Analysis and Feature Reduction Using Computational Intelligence Methods

Ir Majid Bahrepour, Ir. Berend Jan van der Zwaag, Ir. Nirvana Meratnia, Ir. Paul Havinga

The Effect of Standardization In Multicriteria Decision Analysis on Health Policy Outcomes

Jacqueline Young, Claus Rinner, Dianne Patychuk

A Fuzzy Approach to the Small Area Estimation of Poverty in Italy

Paola Perchinunno, Silvestro Montrone, Francesco Campobasso, Annarita Fanizzi

10:30-12:30pm Room: Harboreast E

Pervasive Systems for Healthcare

Session Chair: Giuseppe De Pietro

Building a minimalistic multimedia user interface for quadriplegic patients

Constantinos Patsakis, Nikolaos Alexandris

Color Image Restoration Technique Using Gradient Edge Direction Detection

Gwanggil Jeon, Jechang Jeong, Sang-Jun Park

A Smart Sensor Network Architecture for e-Health Applications

Abdellah Chehri, Gwanggi Jeon, Hussein Mouftah

The iCabiNET System: Building Standard Medication Records from the Networked Home
Nores Yolanda Blanco-Fernandez, Jose J. Pazos-Arias

Martin Lopez-

A glove-based interface for 3D medical image visualization

Luigi Gallo

Open Issues in IDS design for Wireless Biomedical Sensor Networks

Luigi Coppolino, Luigi Romano

Context-Aware Notifications: A Healthcare System in a Nursing Home

Sandra Nava-Muñoz . Ma. Victoria Meza, Alberto Morán

Multimodality in Pervasive Environment

Marco Anisetti, Valerio Bellandi, Paolo Ceravolo, Ernesto Damiani

12:30-1:30pm Lunch: Harboreast D

1:30-3:30pm Room: Harborwest A-B

Decision Making Theory (Part 2)

Decision-making by "Minor ANP" and classification of the type

Ozaki Toshimasa, Lo Mei-Chen, Kinoshita Eizo, Tzeng Gwo-Hshiung

Improving the e-store business Model for satisfying customers' needs using a hybrid MCDM combined DANP with grey relational model

Wan-Yu Chiu, Gwo-Hshiang Tzeng, Han-Lin Li

The Weighted Least Square Method Applied To the Binary and Ternary AHP

Kazutomo Nishizawa, Iwaro Takahashi

Towards semantic-aware and ontology-based E government service integration ? an applicative case study on Saudi Arabs King Abdullah Scholarship Program

Abdullah Alqahtan, Haiyan Lu, Jie Lu

Validating and designing a service centric view for C2TP: Cloud Computing Tipping Point model

Chris Peiris, Dharmendra Sharma, Bala Balachandran

Utilization of Agents for Key Distribution in IEEE 802.11

Shirantha Wijesekera, Xu Huang, Dharmendra Sharma

1:30-3:30pm

Room: Harborwest C

Intelligent Spatial Decision Analysis (Part 2)

Geographical Information Systems and Ontologies: two instruments for building Spatial Analysis Systems

Francesco Rotondo

Real Estate Decision Making Processes and Web-based Applications: An Integrated Approach

Nicoletta Dessì, Michele Argiolas, Giampaolo Marchi, Pes Barbara

Geographical and Multi-Criterial Approach For Hydro - Geological Risk Evaluation In Decision Making Processes

Francesco Selicato, Grazia Maggio

Analysis of Vulnerability of Road Networks on the Basis of Graph Topology and Related Attribute Information

Zhe Zhang, Kirsi Virrantaus

Urban Spatiotemporal Data Modeling: Application to the Study of Pedestrian Walkways

Chamseddine Zaki, Elyes Zekri, Myriam Servières, Guillaume Moreau, Gérard Hégron

1:30-3:30pm

Room: Harboreast E

International Workshop on Interactive Multimodal Environment

Chair: Marco Anisetti

Constant Bitrate Image Scrambling Method Using CAVLC in H.264

Gwanggil Jeon, Junsang Cho, Seongmin Hong, Jechang Jeong, Jungil Seo

An MDE Parameterized Transformation for Adaptive User Interfaces

Wided Bouchelligua, Mourad Abed, Olfa Daassi, Adel Mahfoudhi, Nesrine Mezhoudi

Agent based MPEG Query Format middleware for standardized multimedia retrieval

Mario Doeller, Guenther Hoelbling, Harald Kosch, Christine Webersberger

Query Result Aggregation in Distributed Multimedia Databases

David Coquil, Mario Döller, Harald Kosch, Vasile-Marian Scuturici, Florian Stegmaier, Christian Vilsmaier

Sensor-Aware Web interface
Marco Anisetti, Dr Luigi Arnone, Bellandi Valerio

AHP method-based decision for services discovery and selection
Younès El Bouzekriel Idrissi

3:30-4:00pm Break

4:00- 6:00pm Room: Harborwest A-B

Using Intelligent Systems for Decision Support in Health Systems
Session Chair: Anne Snowdon

Adoption of Open Source Software in Healthcare
Gokul Bhandari, Anne Snowdon

Symbiotic Simulation Decision Support System for Injury Prevention
Gokul Bhandari, Anne Snowdon

Application of subjective logic to health research surveys
Robert Kent, Jason McCarrell, Gilles Paquette, Brian St. Amour, Ziad Kobti, Anne Snowdon

A Survey of Text Extraction Tools for Intelligent Health Care Decision Support Systems
Dr. Ziad Kobti, Ryan Ramirez, Jordan Iversen, John Ouimet

Using Feature Selection with Bagging and Rule Extraction in Drug Discovery
Ulf Johansson, Cecilia Sönströd, Ulf Norinder, Henrik Boström, Tuve Lofstrom

4:00-6:00pm Room: Harborwest C

Future Direction of Innovative Decision Technologies
Session Chair: Junzo Watada

A Hybrid MADM Based Competence Set Expansion for Marketing Imagination
Chi-Yo Huang, Gwo-Hshiung Tzeng, Shu Hor

Semiconductor Foundry Technology Life Cycle Strategy Portfolio Definitions of Fabless IC Design Firms by Using the ISM and Fuzzy Integral Method
Chi-Yo Huang, Chao-Yu Lai, Gwo-Hshiung Tzeng

An Emotional Designed Based Hybrid MCDM Framework for the Next Generation Embedded System Configurations
Chi-Yo Huang, Hsiang-Chun Lin, Gwo-Hshiung Tzeng

Derivations of Factors Influencing Segmental Consumer Behaviors Using the RST Combined with Flow Graph and FCA
Chi-Yo Huang, Ya-Lan Yang, Gwo-Hshiung Tzeng, Hsiao-Cheng Yu, Hong-Yuh Lee, Shih-Tsunsg Cheng, Sang-Yeng Lo,

Power System Equipments Investment Decision-Making under Uncertainty: A Real Options Approach
Shamshul Bahar Yaakob, Junzo Watada

Key Success Factors of Brand Marketing for Creating the Brand Value Based on a MCDM Model Combing DEMATEL with ANP Methods

Gwo-Hshiung Tzeng, Yung-Lan Wang, Wen-Shiung Lee

4:00-6:30pm Room: Harboreast E

Intelligent Healthcare Information Management

Chair: Nilesh Patel

Building a Novel Web Service Framework-Through a Case Study of Bioinformatics

Hei-Chia Wang, Wei-Chun Chang, Ching-seh Wu

An Architecture for Collaborative Translational Research Utilizing the Honest Broker System

C. Gillies, N. Patel, G. Singh, I. Sethi, J. Akervall, G. Wilson

Multi-agent Framework based on Web Service in Medical Data Quality Improvement for e-Healthcare Information Systems

Ching-seh Wu, Wei-Chun Chang, Nilesh Patel, Ishwar Sethi

Towards a Unified Data Management and Decision Support System for Health Care

Akshai Aggarwal, Robert Kent, Ziad Kobti, Anne Snowdon

Optimizing the Location Prediction of a Moving Patient to Prevent the Accident

Wei-Chun Chang, Chih-Chiang FANG, Ishwar K. Sethi, Ching-Seh Wu

7:00-9:00pm Gala Dinner (Harbor Club)

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| Friday July 30 |
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9:00-10:00am Plenary Room: Harborwest A-B

Intelligent Software for Ecological Building Design

Jens (G.) Pohl, Hisham Assal, Kym (J.) Pohl

10-10:30am Break

Room: Harborwest A-B

10:30-12:30pm

Kansei Communication and Value Creation in Human Mind

Session Chair: Hisao Shiizuka

A Modeling and Systems thinking Approach to Activity Rousing Consumers Buying Motivation -- Focusing on Kansei Information in POP ADS on the Store

Yuji Kosaka Hisao Shiizuka,

Ageing Society and Kansei Communication

Ayako Hashizume, Hisao Shiizuka

A Study on Group Decision-making through Kansei Communication

Yuri Hamada, Hiroko Shoji,

Application of Modeling and Recommendation of Sensitivity to Get Tired

Hiroo Inamura, Yuko Noma, Akihiro Ogino, Hiroko Shoji

Evaluation of Feelings Received from the Rhythms of Percussive Timbre and Relationships between Affective Values

Yuta Kurotaki, Hisao Shiizuka

A Rough-Set-Based Two-class Classifier for Large Imbalanced Dataset

Junzo Watada, Lee-Chuan Lin, Lei Ding, Mohd Ibrahim Shapiai, Lim Chun Chew, Zuwairie Ibrahim Lee Wen Jau, and Marzuki Khalid

10:30-11:30am

Room: Harborwest C

Intelligent Decision Technologies in Accounting and Finance

Session Chair: Lois Tang

A study on the relationship between corporate governance and pricing for initial public offerings: the application of artificial neural networks

Chei-Chang Chiou, Sen-Wei Wang

Combining ICA with Kernel Based Regressions for Trading Support Systems on Financial Options

Shian-Chang Huang, Li Chuan-Chyuan, Lee Chih-Wei, Chang Min-Jen

Integration of Financial and Non-Financial Information for Decision-Making by Using Goal Programming and Fuzzy Hierarchy Process - on a Capital Budgeting Investment Case Study

Yu-Cheng Tang, Ching-Ter Chang

11:30-12:30pm

Room: Harborwest C

Soft Data Analysis based Fuzzy Systems, Control and Decision Making

Session Chair: Mika Sato-Ilic

Binary Tree Classifier Based on Kolmogorov-Smirnov Test

George Georgiev, Iren Valova, Natacha Gueorguieva

Stackelberg Location Problem on a Tree with Fuzzy Random Demand

Takeshi Uno, Hideki Katagiri

Learning based Self-Organized Additive Fuzzy Clustering Method

Tomoyuki Kuwata, Mika Sato-Ilic

10:30-12:30pm

Room: Harboreast E

Human-Computer Interaction in Knowledge-based Environments (Part II)

Chair: George A. Tsihrintzis, Maria Virvou

Modeling Student's Knowledge on Programming Using Fuzzy Techniques

Konstantina Chrysaftadi, Maria Virvou

Simulated Annealing in Finding Optimum Groups of Learners of UML

Kalliopi Tourtoglou, Maria Virvou

A Framework for Automatic Detection of Abandoned Luggage in Airport Terminal

Grzegorz Szwoch, Andrzej Czyzewski, Piotr Dalka

12:30-1:30

pm

Lunch

(Harboreast D)

1:30-4:00pm

Room: Harborwest A-B

Service-oriented Innovation for Designing Intelligent Environment

Session Chair: Toyohide Watanabe

Re-ranking of Retrieved Web Pages, Based on User Preference

Toyohide Watanabe, Kenji Matsuoka

Approximately Solving Aggregate k-Nearest Neighbor Queries over Web Services

Hideki Sato

Remotely Accessible Exercise Environment for Intrusion Detection/Defense Exercises Based on Virtual Machine Networks

Yuichiro Tateiwa, Shoko Tatematsu, Tomohiro Iwasaki, Takami Yasuda

Supporting Design and Composition of Presentation Document Based on Presentation Scenario

Koichi Hanaue, Toyohide Watanabe,

Translation Unit for Simultaneous Japanese-English Spoken Dialogue Translation

Koichiro Ryu, Shigeki Matsubara, Yasuyoshi Inagaki

Automatic Extraction of Phrasal Expressions for Supporting English Academic Writing

Shunsuke Kozawa, Yuta Sakai, Kenji Sugiki, Shigeki Matsubara

A Simulation System of Disaster Areas for Evaluating Communication Systems

Koichi Asakura, Toyohide Watanabe

1:30-4:00pm

Room: Harborwest C

E -commerce and Logistics Management

Session Chair: Xiangpei Hu

A simulated annealing solution for VRPTW problem based on GPU acceleration

JianMing Li, HongSong Tan, Xu Li

Evidential Reasoning Approach for MADA under Group and Fuzzy Decision Environment

Xinbao Liu, Mi Zhou, Jianbo Yang

Study on the Inventory Forecasting in Supply Chains Based on Rough Set Theory and Improved BP Neural Network

Dr. Wang Xuping, Shi Yan, Ruan Junhu, Hongyan Shang

A Model of Disruption Management for Solving Delivery Delay

Qiulei Ding, Xiangpei Hu, Yunzeng Wang

A real-time scheduling method for a variable-route bus in a community

Yan Fang, Xiangpei Hu, Lirong Wu, Yidi Miao

A Fair Transaction Protocol with an Offline Semi-Trusted Third Party

Qian Wang, Qi Su

Impacts of Supply Chain Globalization on Quality Management and Firm Performance: Some Evidences in Shanghai, China

Jiancheng Guan, Lei Fan

1:30-4:00pm

Room: Harboreast E

Human-Computer Interaction in Knowledge-based Environments (Part II)

Chair: George A. Tsihrintzis, Maria Virvou

Camera angle invariant shape recognition in surveillance systems

Damian Ellwart, Andrzej Czyzewski

Applying HTM-based system to recognize object in visual attention

Bac Le Hoai, Phuong Pham Anh, Thang Tran Thanh

Biofeedback-based brain hemispheric synchronizing employing man-machine interface

Katarzyna Kaszuba, Krzysztof Kopaczewski, Eng Piotr Kostek, Piotr Ody

Adapting Spreading Activation Techniques towards a New Approach to Content-based Recommender Systems

Yolanda Blanco-Fernández, Martín López-Nores, José Pazos-Arias

4:00-4:30pm

Break

4:30-6:30pm

Room: Harborwest A-B

Applying Intelligent Decision Technology

Session Chair: Kazumi Nakamatsu

Automated N-Step Univariate Time Series Forecasts with Bayesian Networks

Gordon Rios, Antonino Marvuglia, Richard Wallace

Application of EVALPSN to Network Routing

Toshiaki Imai, Kazumi Nakamatsu, Jair (M) Abe, Takashi Watanabe

A Combination of Case-Based Reasoning and Analytic Hierarchy Process to Support Innovation in Industry

Ana Campos, Rui Neves-Silva

An Efficient Pruning Approach for Mining Classification Association Rules

T.T. Nguyen Loan, D. Vo Bay, N. Nguyen Thang

Combining DEMATEL and ANP with the Grey Relational Assessment Model for Improving the Planning in Regional Shopping Centers

Vivien Y. C. Chen, Chui-Hua Liu, Gwo-Hshiung Tzeng, Ming-Huei Lee, Lung-Shih Yang

4:30-5:30pm

Room: Harborwest C

Advances in Intelligent Decision Systems

Session Chair: Bala Balachandran

Multi-Agent System Protecting from Attacking with Elliptic Curve Cryptography

Xu Huang, Pritam Gajkumar Shah, Dharmendra Sharma

An Implementation of a Multi-Attribute Negotiation Protocol for E-Commerce

Bala Balachandran, Tauhid Tayeb, Dharmendra Sharma, Masoud Mohammadian

A decision support system for ore blending cost optimization problem of blast furnaces

Zhang Ruijun, Wei Jizhong, Lu Jie, Zhang Guangquan

5:30-6:30pm

Room: Harborwest C

Optimization-based Intelligent Techniques in Image Processing
Session Chair: Robert Cierniak

A statistical tailored image reconstruction from projections method
Robert Cierniak

Realistic 3D-modeling of forest growth with natural effect
Margarita Favorskaya, Alexander Zotin, Igor Danilin, Svetlana Smolentseva

4:30-6:30pm Room: Harboreast E

Human-Computer Interaction in Knowledge-based Environments (Part III)
Chair: George A. Tsihrintzis, Maria Virvou

Performance of Watermarking-based DTD Algorithm Under Time-varying Echo Path Conditions
Andrzej Ciarkowski, Andrzej Czyzewski

Watermarking with the UPC and DWT
Evelyn Brannock, Michael Weeks

A Music Recommender Based On Artificial Immune Systems
Aristomenis Lampropoulos, Dionysios Sotiropoulos, George Tsihrintzis

6:30-7:00pm Closing Ceremony Harborwest A-B