KES2007
11th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems

in conjunction with

WIRN2007
XVII Italian Workshop on Neural Networks

Lloyd's Baia Hotel, Vietri sul Mare, Salerno, Italy
(12, 13 and 14 September 2007)

Conference program

Sponsoring Institutions

Università degli Studi di Milano
Seconda Università di Napoli
Comune di Vietri sul Mare
Comune di Salerno
Regione Campania
Ministero per le Riforme e le Innovazioni nella P.A.
Centro Regionale ICT
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Poster sessions
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**Poster sessions**
Keynote lectures

September 12
9:00, Room F
Walter J. Freeman, University of California, Berkeley, USA: Thermodynamic Model of Knowledge Retrieval in Brain Dynamics for Information Processing

14:00, Room F
Hans-Andrea Loeliger, ETH, Zurich, Switzerland: The factor graph approach to model-based signal processing

September 13
9:00, Room F
Mario Lauria, Telethon Institute of Genetics and Medicine, Napoli, Italy: Biologically inspired computing and self-organizing computation

14:00, Room F
Yoshiteru Ishida, Toyohashi University of Technology, Japan: The immune system offered a glimpse: what makes biological systems distinct from artificial ones

September 14
9:00, Room F
Jean-François Cardoso, École Nationale Supérieure des Télécommunications, France: Independent component analysis: Concepts and applications
14:00, Room F

Mario Gerla, University of California, Los Angeles, USA: Probing and mining the urban environment using the vehicular sensor network
Oral presentations
September 12

Session GT12: Web Intelligence, Text and Multimedia Mining and Retrieval (10:30, room F)

Chair: Andreas Nuernberger

A Bootstrapping Approach for Chinese Main Verb Identification
Chunxia Zhang, Cungen Caok Zhendong Niu

A Novel Method of Extracting and Rendering News Web Sites on Mobile Devices
Harshit Kumar, Sungjoon Park, Sanggil Kang

An Adaptation Framework for QBH-based Music Retrieval
Seungmin Rho, Byeong-jun Han, Eenjun Hwang, Minkoo Kim

Fair News Reader: Recommending News Articles with Different Sentiments based on User Preference
Yukiko Kawai, Tadahiko Kumamoto, Katsumi Tanaka

Session GT08: Miscellaneous Intelligent Algorithms (11:50, room F)

Chair: Honghai Liu

A Method of Selecting and Transcoding Content for Mobile Web Service
Euisun Kang, Daehyuck Park, Younghwan Lim

An Approach to Modeling Context-Adaptable Services
Yukyong Kim, Kyung-Goo Doh

Extended Fuzzy C-Means Clustering in GIS Environment for Hot Spot Events
Ferdinando Di Martino, Vincenzo Loia, Salvatore Sessa

Framework of an Immunity-Based Anomaly Detection System for User Behavior
Takeshi Okamoto, Yoshiteru Ishida

Harmony Search Algorithm for Solving Sudoku
Zong Woo Geem

Mutation Probability Threshold of HIV for AIDS
Kouji Harada, Yoshiteru Ishida

Performance Analysis of WAP in Bluetooth Ad-hoc Network System
Il-Young Moon

Prediction of E.Coli Promoter Gene Sequences Using a Hybrid Combination Based on Feature Selection, Fuzzy Weighted Pre-processing, and Decision Tree Classifier
Bayram Akdemir, Kemal Polat Salkh Gunes

Time Discretisation Applied to Anomaly Detection in a Marine Engine
Ian Morgan, Honghai Liu, George Turnbull, David Brown
Session IE02: Artificial Intelligence Applications in Digital Content (10:30, room A)

Chair: Mu-Yen Chen, Hsiao-Ya Chiu

A Personalization Recommendation Framework of IT Certification e-learning system  
Heng-Li Yang, Chen-Shu Wang, Mu-Yen Chen

Breedbot: an Edutainment Robotics System to Link Digital and Real World  
Orazio Miglino, Onofrio Gigliotta, Michela Ponticorvo, Stefano Nolfi

Modeling E-learning System Performance Evaluation with Agent-based Approach  
Hsiao-Ya Chiu, Chieh Chung Sheng, An-Pin Chen

A Hybrid System: Neural Network with Data Mining in an e-Learning Environment  
David Wen-Shung Tai, Hui-Ju Wu, Pi-Hsiang Li

Session IE01: Ambient Intelligence (11:50, room A)

Chair: Cecilio Angulo-Bahon, Hongai Liu

An Efficient Indexing Technique for Location Prediction of Moving Objects  
Dong-Oh Kim, Kang-Jun Lee, Dong-Suk Hong, Ki-Joon Han

Combining Smart Tags and Body Fixed Sensors for Disabled People Assistance  
Juan Antonio Álvarez, Carlos Pérez, Cecilio Angulo, Juan Antonio Ortega

Modeling Smart Homes for Prediction Algorithms  
Alejandro Fernández-Montes, Dr. J. Antonio Álvarez, Juan Antonio Ortega,  
M. D. Cruz, L. González, F. Velasco

Qualitative Correspondence for Object Tracking using Dynamic Panorama  
Farshad Fahimi, Honghai Liu, David J. Brown

Session IE16: Intelligent Mechanism for Knowledge Innovation (15:30, room A)

Chair: Toyohide Watanabe, Teketoshi Ushiama

An Implementation Design of a Fine-Grained Database Access Control Policy Consistency Checking Mechanism  
Bat-Odon Purevjii, Masayoshi Aritsugi, Sayaka Imai, Yoshinari Kanamori

Applying Privacy Preserving Count Aggregate Queries to k-Classification  
Hidehisa Takamizawa, Masayoshi Aritsugi
Synchronizing Music and Video of Query Results in Cross-Media Retrieval System

Teruhisa Hochin, Wen Xue

Message Flow: Design and Architecture of a Message Flow Management System

Hideaki ITO, Teruo FUKUMURA

Event-centralized Management of Geographic Information Collected from Blog

Shoko Yasumura, Masakazu Ikezaki, Toyohide Watanabe, Taketoshi Ushiama

Session GT11: Knowledge Management and Ontologies (10:30, room E1)

Chair: Guy Gouarderes, Gloria Wren, Lakhmi Jain

Corpus Building for Corporate Knowledge Discovery and Management: A Case Study of Manufacturing

Ying Liu, Han Tong Loh

Intelligent Decision Support System for Evaluation of Ship Designers

Sylvena Encheva, Maryna Solesvik, Sharil Tumin

Recent advances in intelligent decision technologies

Gloria Phillips-Wren, Lakhmi Jain

Fitting opportunistic networks data with a Pareto distribution

Bruno Apolloni, Simone Bassi, Sabrina Gaito

Session IP09: Soft computing in electromagnetic applications (11:50, room E1)

Chair: Raffaele Martone

Information Theoretic Learning for Inverse Problem Resolution in Bio-Electromagnetism

Nadia Mammone, Maurizio Fiasché, Giuseppina Inuso, Fabio La Foresta, Francesco Carlo Morabito, Mario Versaci

Modeling of Passive Electronic Circuits with Sensibility Analysis Dedicated to the Sizing by Optimization

Denis Duret, Laurent Gerbaud, Frederic Wurtz, Jean-Pierre Keradic, Bruno Cogitore

Non invasive faults monitoring of electrical machines by solving steady state magnetic inverse problem

Viet Phuong Bui, Olivier Chadebec, Laure-Line Rouve and Jean-Louis Coulomb

Soft Computing Approaches for the Resolution of Electromagnetic Inverse Problems

Marco Cioffi, Vincenzo Cutrapi, Fabrizio Ferraioli, Alessandro Formisano, Raffaele Martone
Session IE15: Intelligent Data Processing in Process Systems and Plants (15:30, room E1)

Chair: Tetsuo Fuchino, Yoshiyuki Yamashita

A knowledge-Based Approach for the Analysis of Abnormal Situations  
Tetsuo Fuchino, Rafael Batres, Yukiyasu Shimada

Integration of Multi-agent Controller and Scheduler for Multi-purpose and Multi-batch Plant  
Takashi Hamaguchi, Hossam Gabbar, Yoshihiro Hashimoto, Teiji Kitazima, Yukiyasu Shimada, Kazuhiro Takeda

Optimization Method for Design of Supercritical Water Oxidation Process Using Genetic Algorithm  
Hiroya Yamasaki, Kazuhiro Takeda, Yukiyasu Shimada, Takashi Hamaguchi, Teiji Kitajima, Tetsuo Fuchino

Transient Air-fuel Ratio Estimation in Spark Ignition Engine Using Recurrent Neural Networks  
Yanhong Zhang, Lifeng Xi, James Liu

Session IK01: Chance Discovery (10:30, room E2)

Chair: Akinori Abe, Yukio Ohsawa

An interface for medical diagnosis support  
Akinori Abe, Yoshiyuki Furutani, Michiko Furutani, Norihiro Hagita, Rumiko Matsuoka

Discovering Color Semantics as a Chance for Developing Cross-Cultural Design Frameworks  
Gyoung Soon Choi, David Cottington, Hilary Dalke, Ruediger Oehlmann

Evaluating a Constructive Meta-Learning Algorithm for a Rule Evaluation Support Method Based on Objective Indices  
Hidenao Abe, Miho Ohsaki, Shusaku Tsumoto, Takahira Yamaguchi

Information Literacy and Everyday Life Risks  
Yumiko Nara

Logic of Discovery in Uncertain Situations. Deciding Algorithms  
Vladimir Rybakov

Session IP02: Computational methods for intelligent neuro-fuzzy applications (12:10, room E2)

Chair: Gwi-Tai Park, Dongwon Kim

Fuzzy Adaptive Particle Filter for Localization of A Mobile Robot  
Young-Joong Kim, Chan-Hee Won, Jung-Min Pak, Myo-Taeg Lim
Fuzzy Combined Polynomial Neural Networks
Seok-Beom Roh, Tae-Chon Ahn

Human Machine Interface with Augmented Reality for the Network Based Mobile Robot
Ho-Dong Lee, Hyun-Gu Lee, Joo-Hyung Kim, Min-Chul Park, Gwi-Tae Park

Session IE19: Logic based intelligent information systems
(15:30, room E2)

Chair: Kazumi Nakamatsu

A Logic Grammar for Circuit Analysis - Problems of Recursive Definition
Takushi Tanaka

A Natural Deduction System for Annotated Predicate Logic
Seiki Akama, Kazumi Nakamatsu, Jair Abe

An Intelligent Coordinated Traffic Signal Control Based on EVALPSN
Kazumi Nakamatsu, Jair Abe, Seiki Akama

Knowledge Assessment Based on Many-Valued Logic
Sylvia Encheva, Sharil Tumin

Monadic Curry Algebras Qt
Jair Abe, Seiki Akama, Kazumi Nakamatsu

Session IP08: Soft computing approach to management engineering (10:30, room B+C)

Chair: Junzo Watada, Huey-Ming Lee, Taki Kanda

A Bio-Soft Computing Approach to Re-arrange a Flexible Manufacturing Robot
Rohani Binti Abu Bakar, Junzo Watada

A Fuzzy Measure Identification Method by Diamond Pairwise Comparisons: AHP Scales and Grabisch’s Graphical Interpretation
Eiichiro Takahagi

A Self-Adaptive Evolutionary Negative Selection Approach for Home Anomaly Events Detection
Huey-Ming Lee, Ching-Hao Mao

An alternative Measure: Chinese Urbanization
Bing Xu, Junzo Watada

Certificate and Authority Application Based on Grid Environment
Huey-Ming Lee, Tsang-Yean Lee, Heng-Sheng Chen

Comparison of Consumer Behaviors in Taiwan Non-Store Channels
Lily Lin, Huey-Ming Lee, Li-Hsueh Lin
DNA Computing Approach to Management Engineering
Don Jyh-Fu Jeng, Rohani Abu Bakar, Junzo Watada

Dynamic Tracking System for Object Recognition
Zalili Binti Musa, Junzo Watada

Fuzzy Group Assessment for Facility Location Decision
Lily Lin, Huey-Ming Lee

Judgment on Consistency of Human Feelings in Paired Comparison
Taki Kanda

Relationship between Alarm of Collision Alarm System and Driver’s Operation of Brakes
Hiroaki Kosaka, Hirokazu Nishitani

Study of a Numerical Simulation for Computing to Accurate Cutting with High-Velocity Waterjet
Sheau-Wen Shiah, Tzeng-Yuan Heh, Fu-Cheng Yang, Chan-Yung Jen, Po-Hung Lin

Session IS01: Advanced Cooperative Work (10:30, room D)
Chair: Juan Munemori, Takashi Yoshino, Takaya Yuizono

Development and Evaluation of A Ubiquitous Historical Tour Support System
Satoru Fujii, Yasuke Takahashi, Hisayoshi Kageyama, Hirokazu Aoyama, Tadanori Mizuno

Distance Learning System for Programming and Software Engineering
Kouji Yoshida, Isao Miyaji, Kunihiro Yamada, Hiroshi Ichimaru

Evaluation of Metadata-Based Data Aggregation Scheme in Clustering Wireless Sensor Networks
Yoshitsugu Obashi, Tomohiro Kokogawa, Yi Zheng, Huifang Chen, Hiroshi Mineno, Tadanori Mizuno

Impression Evaluation of Presentation Contents Using Embodied Characters’ Dialogue with Atmosphere
Junko Ito, Jun Munemori

Learning Communities for Information Systems Design Class with Process Model Approach
Mikinori Kokubo, Masaaki Nakamura, Teruhisa Ichikawa

Markov model based mobile clickstream analysis with sub-day, day and week-scale transitions
Toshihiko Yamakami
New Methodology for Information Resource Management by 4 Aspects Parallel Approach  
Kazuya Shizuoka Matsudaira

Reliable Communication Methods for Mutual Complementary Home-Network  
Takashi Kaneyama, Kunihiro Yamada, Takashi Furumura, Hiroshi Mineno, Tadanori Mizuno

Session IS12: Skill Acquisition and Ubiquitous Human Computer Interaction (15:30, room D)  
Chair: Hirokazu Taki, Satoshi Hori

A fast reading spatial knowledge system by ultrasonic sound beams  
Taizo Miyachi, Jens J. Balvig, Jiang Shen Bo, Ipei Kuroda

A Quiet Navigation for Safe Crosswalk by Ultrasonic Beams  
Taizo Miyachi, Jens J. Balvig, Wataru Kisada, Kazuki Hayakawa, Takeshi Suzuki

A study of meaning comprehensibility of pictograms for lathe procedural instructions  
Atsuko Yamazaki, Joji Yabutani, Yoko Ebisawa, Satoshi Hori

Indoor Localization for Mobile Node based on RSSI  
Hirokazu Miura, Kazuhiko Hirano, Noriyuki Matsuda, Hirokazu Taki, Norihiro Abe, Satoshi Hori

Sketch Learning Environment based on Drawing Skill Analysis  
Masato Soga, Noriyuki Matsuda, Sae Ko Takagi, Hirokazu Taki, Fujiichi Yoshimoto

September 13

Session GT06: Knowledge Based and Expert Systems (10:30, room F)  
Chair: Anne Håkansson

Automated Testing for Knowledge Based Systems  
Ronald Hartung, Anne Håkansson

Building Maintainable Knowledge Bases with Knowledge Objects  
John Debenham

Influenza Forecast: Case-Based Reasoning or Statistics?  
Rainer Schmidt, Tina Waligora
Modelling a Team of Radiologists for Lung Nodule Detection in CT Scans  
*Michela Antonelli, Marco Cococcioni, Graziano Frosini, Beatrice Lazzerini, Francesco Marcelloni*

**Session GT09: Intelligent Vision and Image Processing**  
(11:50, room F)

**Chair: Tuan Pham**

3D α-expansion and Graph Cut Algorithms for Automatic Liver Segmentation from CT Images  
*Elena Casiraghi, Gabriele Lombardi, Stella Pratissoli, Simone Rizzi*

Analysis and Recognition of Touching Cell Images Based on Morphological Structures  
*Donggang Yu, Dr. Tuan D. Pham, Xiaobo Zhou*

Comparison of Accumulative Computation with Traditional Optical Flow  
*Antonio Fernández-Caballero, Rafael Pérez-Jiménez, Miguel A. Fernández, María T. López*

Face Recognition Based on 2D and 3D Features  
*Stefano Arca, Raffaella Lanzarotti, Giuseppe Lipori*

Generalization of a Recognition Algorithm Based on Karhunen-Loève Transform  
*Francesco Gianfelici, Claudio Turchetti, Paolo Crippa, Viviana Battistelli*

JPEG2000 Low Complexity Allocation Method of Quality Layers  
*Francesc Auli-Llinàs, Joan Serra-Sagristà, Carles Rúbies-Feijoo, Lluís Donoso-Bach*

Motion Estimation Algorithm in Video Coding  
*Vibha Bafna, Milind M. Mushrif*

Reference Independent Moving Object Detection: An Edge Segment Based Approach  
*M. Ali Akher Dewan, Julius M. Hossain, Oksam Chae*

Search for a Computationally Efficient Image Super-Resolution Algorithm  
*Vivek Bannore, Leszek Swierkowski*

**Session IE03: Artificial Intelligence Applications in Security**  
(10:30, room A)

**Chair: Emilio Corchado, Rodolfo Zunino**

A Dedicated Hardware for Fingerprint Authentication  
*Giovanni Danese, Mauro Giachero, Francesco Leporati, Giulia Matrone, Nelson Nazzicari*

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Belnap’s Logic in Sharing Protected Web Resources  
*Syleia Encheva, Sharil Tumin*

IDS Based on Bio-Inspired Models  
*Paolo Gastaldo, Francesco Picasso, Rodolfo Zunino, Álvaro Herrero, Emilio Corchado, José Sáiz*

Security Policies Tuning Among IP Devices  
*Simone Ferraresi, Emanuele Francocci, Alessio Quaglini, Francesco Picasso*

Session IE14: Intelligent Control Theory and Applications  
*(11:50, room A)*

Chair: Kazumi Nakamatsu, Scheng-Luen Chung

A Gait Based Approach to Detect Directional Bias of Four-Legged Robots’ Direct Walking Utilizing Acceleration Sensors  
*Ding-Jie Huang, Wei-Chung Teng*

An Intelligent Algorithm for Scheduling Jobs on a Single Machine with a Common Due Date  
*Zne-Jung Lee, Chen-Chia Chuang, Kuo-Ching Ying*

Application of Intelligent Neural Networks to Prediction of Micro-Electroforming for U-Type Micro-Cavity  
*Sheau-Wen Shiah, Pai-Yu Chang, Tseng-Yuan Hch, Po-Hung Lin, Fu-Cheng Yang*

Design of a Supervisor for Traffic Light Systems  
*Ta-Hsiang Chung, Yi-Sheng Huang*

Session IE18: Intelligent Techniques for biometric based authentication  
*(15:30, room A)*

Chair: Ernesto Damiani, Antonia Azzini, Stefania Marrara

A Fuzzy Approach to Multimodal Biometric Authentication  
*Antonia Azzini, Stefania Marrara, Roberto Sassi, Fabio Scotti*

An Open Source Java Framework for Biometric Web Authentication based on BioAPI  
*Elisardo Gonzalez Agulla, Jose Luis Alba Castro, Carmen Garcia Mateo, Enrique Otero Murus*

Feature Distribution of the Fingerprint Template Generated by the Geometric Hashing-based Fuzzy Vault  
*Sungju Lee, Yongwha Chung, Daesung Moon*

Hand Geometry Verification Using Time Series Representation  
*Vit Niennattrakul, Chotirat Ann Ratanamahatana, Dachawut Wanichsan*
Navigation dynamics as a biometrics for authentication  
*Ernesto Damiani, Gabriele Gianini*

**Session IE09: Innovations in Intelligent Data Analysis (10:30, room E1)**  
Chair: Mika Sato, Lakhmi Jain

A Likelihood Ratio Test for Differential Metabolic Profiles in Multiple IntensityMeasurements  
*Frank Klawonn, Claudia Choi, Beatrice Benkert, Bernhard Thielen, Richard Mönch, Max Schobert, Dietmar Schomburg, Dieter Jahn*

Combining Bagging, Boosting and Dagging for Classification Problems  
*Sotiris Kotsiantis, D. Kanellopoulos*

Functional Clustering and Functional Principal Points  
*Nobuo Shimizu, Masahiro Mizuta*

Prescreening of Candidate Rules using Association Rule Mining and Pareto-Optimality in Genetic Rule Selection  
*Hisao Ishibuchi, Isao Kujimia, Yasuke Nojima*

Term Clustering in Texts Based on Fuzzy Neighborhoods and Kernel Functions  
*Sadaaki Miyamoto, Satoshi Hayakawa, Yuichi Kawasaki*

Variable Based Fuzzy Blocking Regression Model  
*Mika Sato-Ilic*

**Session IE08: Hybrid Artificial Intelligence Systems Workshop (HAIS07-KES2007) (12:10, room E1)**  
Chair: Juan M. Corchado, Emilio Corchado

Automated Ham Quality Classification Using Ensemble Unsupervised Mapping Models  
*Bruno Baruque, Emilio Corchado, Hujun Yin, Jordi Rovira, Javier González*

Hybrid Architecture for a Reasoning Planner Agent  
*Javier Bajo, Dante I. Tapia, Ana de Lais, Sara Rodríguez, Juan F. de Paz, Juan M. Corchado*

Using a Neurofuzzy Approach in a Medical Application  
*Constantinos Koutsojannis, Ioannis Hatzilygeroudis*
Session GT05: Agent Systems (15:30, room E1)

Chair: Ngoc Thanh Nguyen

A Belief-Desire Framework for Goal Revision
Célia da Costa Pereira, Andrea G. B. Tettamanzi

Calculating optimal decision using Meta-level agents for Multi-Agents in Networks
Anne Håkansson, Ronald Hartung

Field-based Coordination of Mobile Intelligent Agents: An Evolutionary Game Theoretic Analysis
Krunoslav Trzce, Ignac Lovrek

Hybrid Filtering Methods Applied in Web-based Movie Recommendation System
Ngoc Thanh Nguyen, Maciej Rakowski, Michal Rusin, Janusz Sobecki, Lakhmi C. Jain

The Statistical Verification of Rough Classification Algorithms
Adrianna Kozierkiewicz, Ngoc Thanh Nguyen

Session IK03: Knowledge - Based Interface Systems (I) (10:30, room E2)

Chair: Naohiro Ishii, Yuji Iwahori

A unified approach to Web usage mining based on frequent sequence mining
Nobuhiro Inuzuka, Jun-ichi Hayakawa

Estimation of Initial Contour Based on Edge Background Subtraction for Self-affine Mapping System
Haruki Kawanaka, Hirofumi Kato, Fuminori Matsubara, Yuji Iwahori, Robert J. Woodham

Improvement of Accuracy for Gaussian Curvature Using Modification Neural Network
Yuji Iwahori, Takashi Nakagawa, Shinji Fukui, Haruki Kawanaka, Robert J. Woodham, Yoshinori Adachi

Shadow Removal Method for Real-Time Extraction of Moving Objects
Shinji Fukui, Nozomi Yamamoto, Yuji Iwahori, Robert J. Woodham

Session IK04: Knowledge - Based Interface Systems (II) (11:50, room E2)

Chair: Yoshinori Adachi, Nobuhiro Inuzuka

Delayed Learning and the Organized States
Toshinori Deguchi, Naohiro Ishii
Educational System Using Self-monitor Study and Streaming  
*Masahiro Ozaki, Yoshinori Adachi, Saori Takeoka, Ai Sugimura, Naohiro Ishii*

Influence of Presence of Frame on Writer Recognition  
*Yoshinori Adachi, Masahiro Okazi, Yuji Iwahori, Naohiro Ishii*

Information Extraction by XLM  
*Masashi Okada, Naohiro Ishii, Nariaki Kato*

**Session IK05: Knowledge and Information Management in Social Community (15:30, room E2)**

*Chair: Toyohide Watanabe, Naoto Mukai, Jun Feng*

A Regional Safety Information Sharing System Based on CMS and Online Map System  
*Akira Hattori, Masato Goto, Takami Yasuda, Shigeki Yokoi*

Avoidance of Traffic Delay for Panicking Crowds Subject to Information Propagation  
*Naoto Mukai, Toyohide Watanabe, Jun Feng*

Optimization of Vehicle Assignment for Car Sharing System  
*Kentarou Uesugi, Naoto Mukai, Toyohide Watanabe*

Indexing of Moving Objects on Road Network Using Composite Structure  
*Jun Feng, Jiamin Lu, Yuelong Zhu, Naoto Mukai, Toyohide Watanabe*

A Piecewise Linear Representation Method of Time Series Based on Feature Points  
*Yuelong Zhu, De Wu, Shijin Li*

**Session IP03: Learning Automata & Soft Computing Techniques and Their Applications (10:30, room B+C)**

*Chair: Norio Baba, Ann Nowe, Katja Verbeeck*

A Consideration on the Learning Performances of the Hierarchical Structure Learning Automata (HSLA) Operating in the General Nonstationary Multi-teacher Environment  
*Norio Baba, Yoshio Mogami*

A Cooperative Grid Computing Approach to Automated Theorem Finding and Automated Problem Proposing  
*Jingde Cheng, Yuichi Goto, Shinsuke Nara, and Takahiro Koh*

Fast Statistical Learning Algorithm for Feature Generation  
*Minoru Fukumi, Stephen Karungaru, Satoru Tsuge, Miyoko Nakano, Takuya Akashi, Yasue Mitsukura*
Human Three-Dimensional Modeling based on Intelligent Sensor Fusion for A Tele-operated Mobile Robot  
Naoyuki Kubota, Masashi Satomi, Kazuhiko Taniguchi, Yasutsugu Nogawa

Optimal Convergence in Multi-Agent MDPs  
Peter Vrancx, Katja Verbeeck, Ann Nowé

Reinforcement Learning Scheme for Grouping and Anti-Predator Behavior  
Koichiro Morihiro, Haruhiko Nishimura, Teijiro Isokawa, Nobuyuki Matsui

Three-dimensional Classification of Insect Neurons Using Self-Organizing Maps  
Hiroki Urata, Teijiro Isokawa, Yoich Seki, Naotake Kamiura, Nobuyuki Matsui, Hidetoshi Ikeno, Ryohei Kanzaki

Using weak prior information on structures to learn Bayesian Networks  
Massimiliano Mascherini, Federico M. Stefanini

Session IP04: Learning from uncertain data (15:30, room B+C)  
Chair: Dario Malchiodi

A Modified SVM Classification Algorithm for Data of Variable Quality  
Bruno Apolloni, Dario Malchiodi, Luca Natali

Exploiting Uncertain Data in Support Vector Classification  
Jianqiang Yang, Steve Gunn

Fuzzy-Input Fuzzy-Output One-Against-All Support Vector Machines  
Christian Thiel, Stefan Scherer, Friedhelm Schwenker

Reliable learning: a theoretical framework  
Marco Muselli, Francesca Ruffino

Session IS13: XML Security (10:30, room D)  
Chair: Stefania Marrara, Ernesto Damiani, Marjirus Fansi, Alban Gabaillon

A Rewrite based Approach for Enforcing Access Constraints for XML  
Sriram Mohan, Arjijit Sengupta, Yuqing Wu

On Flexible Modeling of History-Based Access Control Policies for XML Documents  
Patrick Röder, Omid Tafreschi, Claudia Eckert

Securely Updating XML  
Ernesto Damiani, Majirus Fansi, Alban Gabaillon, Stefania Marrara

XML-BB: A model to handle relationships protection in XML documents  
Frédéric Cuppens, Nora Cuppens-Boulahia, Thierry Sans
Session IS05: Environment Support in Advanced Learning collaboration (11:50, room D)

Chair: Toyohide Watanabe, Tomoko Kojiri

Practical Environment for Realizing Augmented Classroom with Wireless Digital Pens
Motoki Miura, Susumu Kanifujii, Yasuyuki Sakamoto

A Next-generation Audio-guide System for Museums “SoundSpot”: An Experimental Study
Akiko Deguchi, Hiroshi Mizoguchi, Shigenori Inagaki, Fusako Kusunoki

Reification Method to Encourage the Learning Communication on Meta-Cognition
Kazuhisa Seta, Mitsuru Ikeda

An Important Posting Notification Function in an Intelligent Bulletin Board System for e-Learning
Takashi Yukawa, Hiraku Amarume, Yoshimi Fukumura

Session IS04: Engineered Applications of Semantic Web - SWEA (15:30, room D)

Chair: Tommaso Di Noia, Eugenio di Sciascio, Giovanni Semeraro

LODE: Global Reasoning on E-Stories for Deaf Children
Rosella Gennari, Ornella Mich

NavEditOW - A System for Navigating, Editing and Querying Ontologies through the Web
Andrea Bonomi, Alessandro Mosca, Matteo Palmonari, Giuseppe Vizzari

Personalized interfaces for a semantic web portal: tourism information search
Zeina Jrad, Marie-Aude Aufaure

Semantic Bayesian Profiling Services for Information Recommendation
Pierpaolo Basile, Eufemia Tinelli, Marco Degemmis, Tommaso Di Noia, Giovanni Semeraro, Eugenio Di Sciascio

Shaping Personal Information Spaces from Collaborative Tagging Systems
Fabio Abbattista, Fabio Calefato, Domenico Gendarmi, Filippo Lanubile

September 14

Session GT14: Other Intelligent Systems Applications (10:30, room F)

Chair: Viacheslaw Shkodirev, Floriana Esposito

A Query-Strategy-focused Taxonomy and a Customizable Benchmarking Framework for Peer-to-Peer Information Retrieval Techniques
Alfredo Cuzzocrea

An Approach for Four Way Set Associative Multilevel CMOS Cache Memory
Prasanna Palsodkar, Amol Deshmukh, Preeti Bajaj, Avinash G. Keskar

An Intelligent Typhoon Damage Prediction System from Aerial Photographs
Chien-Chang Hsu, Zhi-Yu Hong

GIGISim - The Intelligent Telehealth System. Computer Aided Diabetes Management - a New Review
Joanna Koleszynska

ID-Based Authentication for the Security in the Mobile Node
Young-bok Cho, Yoon-sa Jeong, Sang-ho Lee

Implementation of Intelligent Active Fault Tolerant Control System
Seda Postacioglu, Kadir Erkan, Dr. E. Dogru Bolat

Inductive Concept Retrieval and Query Answering with Semantic Knowledge Bases through Kernel Methods
Nicola Fanizzi, Claudia d’Amato

New Machine Scores and Their Combinations for Automatic Mandarin Phonetic Pronunciation Quality Assessment
Fuping Pan, Qingwei Zhao, Yonghong Yan

Session GT01: Artificial Neural Networks and Connectionists Systems (17:30, room F)

Chair: Ryohei Nakano

A Simple and Effective Neural Model for the Classification of Structured Patterns
Edmondo Trentin, Ernesto Di Iorio

Design of Neural Networks
Claudio Moraga

Geometric Algebra Rotors for Sub-Symbolic Coding of Natural Language Sentences
Giovanni Pilato, Agnese Augello, Giorgio Vassallo, Salvatore Gaglio

Online Training of Hierarchical RBF
Francesco Belloccio, Stefano Ferrari, Vincenzo Piuri, N. Alberto Borghese

Selecting Features by Learning Markov Blankets
Antonino Freno
Session IE06: Computation Intelligence for Multimedia Processing and Pattern Recognition (10:30, room A)

Chair: Yen-Wei Chen

Audio Watermarking Based on the Psychoacoustic Model and Modulated Complex Lapped Transform
Hanane Mirza, Alexander Adli, Hien D Thai, Yasunori Nagata, Zensho Nakao

Curvelet-Domain Image Watermarking Based on Edge-embedding
Thai Duy Hien, Ikeda Kei, Hanane Harak, Yen Wei Chen, Yasunori Nagata, Zensho Nakao

Linking KANSAI and Image Features by Multi-layer Neural Networks
Xinyin Huang, Shouta Sobue, Tomoki Kanda and Yen-Wei Chen

Pattern Analysis and Prediction of O-linked Glycosylation Sites in Protein by Principal Component Subspace Analysis
Yen-Wei Chen, Xuemei Yang, Masahiro Ito, Ikuko Nishikawa

Prediction of the O-glycosylation with secondary structure information by Support Vector Machines
Ikuko Nishikawa, Hirotaka Sakamoto, Ikue Nouno, Kazutoshi Sakakibara, and Masahiro Ito

A Content Dependent Visualization System for Symbolic Representation of Piano Stream
Alexander Adli, Zensho Nakao, Yasunori Nagata

Session IE07: Human Computer Intelligent Systems (12:30, room A)

Chair: Takumi Ichimura, Kazuya Mera

Applying Trust, Reputation and Intuition aspects to Support Virtual Communities of Practice
Juan Pablo Soto, Aurora Vizcaíno, Javier Portillo-Rodríguez, Mario Piattini

Evaluation of Trivial Dialogue Phrase Databases through Practical Application to User-Computer Conversation - Case Study: English - Spanish
Calkin S. Montero, Kenji Araki

Formalizing Recognition of Sketching Styles in Human Centered Systems
Danilo Avola, Fernando Ferri, Patrizia Grifoni

Fostering Multi-Modal Summarization for Trend Information
Tsunekki Kato, Mitsunori Matsushita, and Noriko Kando

Interactive Virtual Oriental Brush with Pen-tablet System
Won-Du Chang, Jungpil Shin
*Maria Rita Ciceri, Stefania Barlzarotti*

Multimodal Sentence Similarity in Human-Computer Interaction Systems  
*Fernando Ferri, Patrizia Grifoni, Stefano Paolozzi*

**Session IE12: Intelligent and Adaptive Systems in Economics, Finance and Management (10:30, room E1)**

**Chair: Marco Corazza, Norio Baba**

Credal Networks for Operational Risk Measurement and Management  
*Alessandro Antonucci, Alberto Piatti, Marco Zaffalon*

Fair Consistency Evaluation in Fuzzy Preference Relations and in AHP  
*Matteo Brunelli, Michele Fedrizzi*

Making Financial Trading by Recurrent Reinforcement Learning  
*Francesco Bertoluzzo, Marco Corazza*

Multiple Ant Colony Optimization for a Rich Vehicle Routing Problem: a Case Study  
*Paola Pellegrini, Daniela Favaretto, Elena Moretti*

Portfolio Optimization through Elastic Maps: some evidence from the Italian Stock Exchange  
*Marina Resta*

Prediction of Golden Cross & Dead Cross by Neural Networks and Its Utilization  
*Norio Baba, Kou Nin*

Adaptive Use of Technical Indicators for Predicting the Intra-day Price Movements  
*Mieko Tanaka-Yamawaki, Seiji Tokuoka*

**Session IE11: Intelligent Agents and Their Applications (17:30, room E1)**

**Chair: Dharmendra Sharma, Wanli Ma, Haeng Kon Kim, Dariusz Król**

A Design and Testing Technology for Ubiquitous Robot Companion Software Component  
*Sun-Myung Hwang, Yun-Koo Chung*

An Architecture for Agent Coordination and Cooperation  
*Angela Consoli, Jeffrey Tweedale, Lakhmi Jain*

Comparison of Mamdani and TSK Fuzzy Models for Real Estate Appraisal  
*Dariusz Król, Tadeusz Lasota, Bogdan Trawiński, Krzysztof Trawiński*
Multi-agent Processing for Query Camouflage via Data Perturbation in Online Medical Surveys
Nazni Farooq, Xu Huang, Dhamendra Sharma

Session IK08: Knowledge-Based Creativity Support Systems (10:30, room E2)
Chair: Susumu Kunifüji, Motoki Miura, Kazuo Misue
Data Mining of Time-Series Medical Data by Formal Concept Analysis
Kenji Sato, Yoshiaki Okubo, Makoto Haraguchi, Susumu Kunifüji
Sadamitsu Toyoda, Motoki Miura, Susumu Kunifüji
Design and evaluation a knowledge management system by using mathematical model of knowledge transfer
Kouji Aoyama, Takanori Ugai, Jun Arima
Overview of Network Information by Using Anchored Maps
Kazuo Misue
Spreadsheet Interface which Simplifies the Visualization of the Network Structures
Satoshi Koike, Kazuo Misue, Jiro Tanaka

Session IK07: Knowledge Engineering in Multi Robot Systems (12:10, room E2)
Chair: Manuel Graña, Richard Duro
Appearance-Based Multi-Robot Following Routes Using Incremental PCA
Luis Paşa, Oscar Reinoso, Arturo Gil, Jose M. Pedrero, Mónica Ballesta
Contribution to legged robot visual servoing
Zelmar Echegoyen, Alicia dAnjou, Manuel Graña
ROBMAT: Teleoperation of a Modular Robot for Collaborative Manipulation
Juan A. Escalera, Manuel Ferre, Rafael Aracil, José Baca

Session IK06: Knowledge and Ontological Engineering for Intelligent Information System Development (KOS) (17:30, room E2)
Chair: Tatiana Gavrilova, Vyacheslav Shkodyrev
An application of decision trees for rule extraction towards telecommunications fraud detection
Constantinos S. Hilas, John N. Sahalos
Learning Objects Repository for Training of Power Systems Operators
G. Arroyo-Figueroa, L. Argotte-Ramos, G. Rodríguez-Ortiz

Mining Meaningful Student Groups Based on Communication History Records
Yang-Sae Moon, Hun-Young Choi, Hea-Suk Kim, Jinho Kim

Ontological Engineering for Practical Knowledge Work
Tatiana Gavriloova

Session IP05: Neural Information Processing for Data Mining (10:30, room B+C)

Chair: Ryohei Nakano, Kazumi Saito

A Neural-based Approach to Facial Expression Mapping between Human and Robot
Minori Gotoh, Masayoshi Kanoh, Shohei Kato, Hidenori Itoh

Interpretable Likelihood for Vector Representable Topic
Ken-ichi Fukui, Kazumi Saito, Masahiro Kimura, Masayuki Numao

Nominally Piecewise Multiple Regression using a Four-Layer Perceptron
Yusuke Tanahashi, Daisuke Kitakoshi, Ryohei Nakano

Prediction of Link Attachments by Estimating Probabilities of Information Propagation
Kazumi Saito, Ryohei Nakano, Masahiro Kimura

Session IP06: Neural networks: advanced applications (11:50, room B+C)

Chair: Eros Pasero

An Application of Machine Learning Methods to PM10 Level Medium-Term Prediction
Giovanni Raimondo, Alfonso Montuori, Walter Moniaci, Eros Pasero, Esben Almkvist

Models for Identifying Structures in the Data: A Performance Comparison
Anna Esposito, Antonietta M. Esposito, Flora Giudicepietro, Maria Marinaro, Silvia Scarpetta

Neural Network Prediction of the Roll Motion of a Ship for Intelligent Course Control
Viorel Nicolau, Vasile Palade, Dorel Aiordachioae, Constantin Miho
Session IP01: Computational Learning Methods for Unsupervised Segmentation (CLeMUS) (17:30, room B+C)

Chair: Emanuele Salerno, Simon Wilson

Blind Source Separation Applied to Spectral Unmixing: Comparing Different Measures of Nongaussianity
Cesar F. Caiafa, Emanuele Salerno, Araceli N. Proto

Extracting Astrophysical Sources from Channel-Dependent Convolutional Mixtures by Correlated Component Analysis in the Frequency Domain
Luigi Bedini, Emanuele Salerno

Random Germs and Stochastic Watershed for Unsupervised Multispectral Image Segmentation
Guillaume Noyel, Jesús Angulo, Dominique Jeulin

Unsupervised Blind Separation and Deblurring of Mixtures of Sources
Livio Fedeli, Ivan Gerace, Francesca Martinelli

Unsupervised Detection of Mammogram Regions of Interest
Michal Haindl, Stanislav Mikes, Giuseppe Scarpa

Session IS07: Interactive visualization and clustering (10:30, room D)

Chair: Roberto Tagliaferri

A new Multi-Layers Method to Analyze Gene Expression
Davide Corona, Vito Di Gesù, Giosuè Lo Bosco, Luca Pinello, Guo-Cheng Yuan

An interactive tool for data visualization and clustering
Francesco Iorio, Gennaro Miele, Francesco Napolitano, Giancarlo Raiconi, Roberto Tagliaferri

Assessing Clustering Reliability and Features Informativeness by Random Permutations
Michele Ceccarelli, Antonio Maratea

Discovering significant structures in clustered bio-molecular data through the Bernstein inequality
Alberto Bertoni, Giorgio Valentini

Evaluating Graph Kernel Methods for Relation Discovery in GO-annotated Clusters
Daniele Merico, Italo Zoppis, Marco Antoniotti, Giancarlo Mauri

Membership Embedding Space Approach and Spectral Clustering
Stefano Rovetta, Francesco Masulli, Maurizio Filippone
Session IS02: Behavior Support in Advanced Learning collaboration (17:30, room D)

Chair: Toyohide Watanabe, Tomoko Kojiri

Learning Phase Model Based Scaffolding and its Fading to Facilitate Collaborative Learning of Critical Thinking
Kazuhisa Seta, Hiroki Satake, Motohide Umano, Mitsuru Ikeda

CSCL Environment for “Six Thinking Hats” Discussion
Yasuhisa Tamura, Shuichi Furukawa

An Agent Oriented Environment for Collaborative Learning - Lessons Learned through Vocational Training on Software Design with UML -
Ken Kurigama, Kazuo Sakai

A Learning Environment for Understanding of Program Division Patterns
Shoichi Nakamura, Keisuke Suzuki, Setsuo Yokoyama, Youzou Miyadera

Organization of Discussion Knowledge Graph from Collaborative Learning Record
Masahide Kakehi, Tomoko Kojiri, Toyohide Watanabe, Takeshi Yamada, Tomoharu Iwata
Poster presentations
September 12

Session GT08: Miscellaneous Intelligent Algorithms (17:10, room E1)

Chair: Honghai Liu

Alternative Methods of Wave Motion Modelling
Lukasz Korus

Conceptual Enrichment of Locations Pointed Out by the User
Ana Alves, Raquel Hervás, Francisco C. Pereira, Pablo Gervás, Carlos Bento

Design of Urban Growth Probability Model by Using Spatial Association Rules
Seonghwi Cho, Sangeon Hong, Junggeop Kim, Soohong Park

Detecting Individual Activities from Video in a Smart Home
Oliver Břidčka, Patrick Reignier, James Crowley

Path Prediction of Moving Objects on Road Networks through Analyzing Past Trajectories
Sang-Wook Kim, Jung-Im Won, Jong-Dae Kim, Miyoung Shin, Junghoon Lee, Hanil Kim

Performance Evaluation of Embedded Garbage Collectors in CVM Environment
Chang-Il Cha, Sang-Wook Kim, Ji-Woong Chang, Miyoung Shin

Session GT11: Knowledge Management and Ontologies (17:10, room E1)

Chair: Guy Gouarderes, Gloria Wren, Lakhmi Jain

An Ontology for Modelling Human Resources Management Based on Standards for e-Employment Services
Asunción Gómez-Pérez, Jaime Ramírez, Boris Villazón-Terrazas

Philosophy Ontology for Learning the Contents of Texts
Jungmin Kim, Hyunsook Chung

Reinforcement Learning of Competitive Skills with Soccer Agents
Jinsong Leng, Colin Fyfe, Lakhmi Jain

Session GT12: Web Intelligence, Text and Multimedia Mining and Retrieval (17:10, room E1)

Chair: Andreas Nuernberger

An Association Method Using Concept-base
Noriyuki Okumura, Eriko Yoshimura, Hirokazu Watabe, Tsukasa Kawaoka

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Session GT13: Intelligent Signal processing, Control and Robotics (17:10, room E1)

Chair: Miroslav Karny

AI Techniques for Waste Water Treatment Plant Control. Case Study: Denitrification in a Pilot-Scale SBR
Davide Sottara, Luca Luccarini, Paola Mello

An Embedded Real-Time Automatic Lane-Keeping System
Salvatore Vitabile, Salvatore Bono, Filippo Sorbello

Design of Intelligent Traffic Controller for Urban Traffic Light Systems
Yi-Sheng Huang, Sheng-Luen Chang, Ta-Hsiang Chung, Kazumi Nakamatsu

Effects of Kinematics Design on Tracking Performance of Model-Based Adaptive Control
Serdar Kucuk

Fault Detection with Evolution Strategies Based Particle Filter and Backward Sequential Probability Ratio Test
Katsuji Uosaki, Toshiharu Hatanaka

Infringing Key Authentication of an ID-Based Group Key Exchange Protocol Using Binary Key Trees
Junghyun Nam, Juryon Paik, Youngsook Lee, Jin Kwak, Dr. Ung Mo Kim, Dongho Won

Multiresolution ICA for Artifact Identification from Electroencephalographic Recordings
Nadia Mammone, Giuseppina Inuso, Fabio La Foresta, Francesco Carlo Mombito

Neural Networks for Matching in Computer Vision
Giansalvo Cirrincione, Maurizio Cirrincione

SNNR-Based Improved Multi-modal Fusion and Fission Using Fuzzy Value Based on WPS and Web
Jung-Hyun Kim, Kwan-Seok Hong

Vision Technologies for Intelligent Vehicles
Session IE01: Ambient Intelligence (17:10, room E2)
Chair: Cecilio Angulo-Bahon, Hongai Liu
Geometrical Representation of Quantity Space and Its Application to Robot Motion Description
Honghai Liu, David J. Brown, George M. Coghill

Session IE02: Artificial Intelligence Applications in Digital Content (17:10, room E2)
Chair: Mu-Yen Chen, Dr. Hsiao-Ya Chiu
An Architecture for E-Learning System with Computational Intelligence
Marc El Alami, Nicolas Casel, Denis Zamponiéris
APD-A Tool for Identifying Behavioural Patterns Automatically from Clickstream Data
I-Hsien Ting, Lillian Clark, Chris Kimble, Daniel Kudenko, Peter Wright
Develop E-Learning Platform for Reinforcement Learning on Temperature Sensor
Wen-Jye Shyr
Scalable Vector Graphics (OpenVG) for Creating Animation Image in Embedded Systems
Sang-Yun Lee, Sunghwan Kim, Jihoon Chung, Byung-Uk Choi

Session IE15: Intelligent Data Processing in Process Systems and Plants (17:10, room E2)
Chair: Tetsuo Fuchino, Yoshiyuki Yamashita
A multi-agent approach to process design
Rafael Batres, Hikaru Takashima
A Sliding-mode Control Approach in Ultra-precision Positioning System
Insung Choi, Seangok Choi, Gunhaeng Heo, Kiheon Park, Kwanho You
An Agent-based Early Manufacturability Assessment for Collaborative Design in Coating Process
Chii-Ruey Lin, Pei-Shu Fan, Yea-Jou Shiau, MuDer Jeng

Session IE16: Intelligent Mechanism for Knowledge Innovation (17:10, room E2)
Chair: Toyohide Watanabe, Teketoshi Ushiamah
Scalable 2-Pass Data Mining Technique for Large Scale Spatio-Temporal Datasets
Tahar Kechadi, Michela Bertolotto
Session IE19: Logic based intelligent information systems (17:10, room E2)
Chair: Kazumi Nakamatsu
Intelligent Design of Diagnosable Systems: A Case Study of Semiconductor Manufacturing Machines
YuanLin Wen, ShengLuen Chung, MuDer Jeng, LiDer Jeng

Session IP02: Computational methods for intelligent neuro-fuzzy applications (17:10, room E2)
Chair: Gwi-Tai Park, Dongwon Kim
Implementation of Vision Based Walking Assistant System for Biped Robot
Tae-Koo Kang, Dongwon Kim, Gwi-Tae Park
The Development of Interactive Feature Selection and GA Feature Selection Method for Emotion Recognition
Kwee-Bo Sim, In-Hun Jang, Chang-Hyun Park

Session IP08: Soft computing approach to management engineering (17:10, room E2)
Chair: Junzo Watada, Huey-Ming Lee, Taki Kanda
An Analysis of Feelings of Brassiere-Wearing and Possibility to Simulate Them based on Body Shape
Dong-Eun Choi

Session IK01: Chance Discovery (17:10, room D)
Chair: Akinori Abe, Yukio Ohsawa
A Method for Visualising Possible Contexts
Shigeki Amitani, Ernest Edmonds
Creating Chances through Cognitive Niche Construction. The Role of Affordances
Lorenzo Magnani
RFID Tags without Customers ID in Book Library for Detecting Latent Interest of User Group
Yukio Ohsawa, Takuma Hosoda, Takeshi Ui, Misato Ueda, Hirofumi Tanaka
Trigger to switch individual’s interest toward unconscious preference
Yoshikazu Maeno, Ito Takaichi, Ohsawa Yukio
Visualization of Similarities and Dissimilarities in Rules using Multidimensional Scaling
Shusaku Tsumoto, Shoji Hirano

Session IK09: Knowledge-based Multi-criteria Decision Support (17:10, room D)
Chair: Hsuan-Shih Lee
A Fuzzy Ranking Approach to Data Envelopment Analysis
Hsuan-Shih Lee, Pei-Di Shen, Wen-Li Chyr
A New Information Fusion Method for Fuzzy Information Retrieval
Hsuan-Shih Lee, Ming-Tao Chou, Wei-Kuo Tseng, Hsin-Hsiung Fang, Chen-Huei Yeh
An Analytic Approach for Synthesizing Comparison Matrices in AHP
Hsuan-Shih Lee, Cheng-Chi Chung, Su-Man Wang, Ming-Tao Chou, Chen-Huei Yeh
Estimating Missing Values in Incomplete Additive Fuzzy Preference Relations
Hsuan-Shih Lee, Ming-Tao Chou, Hsin-Hsiung Fang, Wei-Kuo Tseng, Chen-Huei Yeh
Fuzzy Logic Based Reputation System for Mobile Ad Hoc Networks
Jin-Long Wang, Shih-Ping Huang
Synthesizing Comparison Matrices of AHP under Group Decision
Ming-Tao Chou, Hsuan-Shih Lee, Ching-Wu Chu, Chao-Yuan Cheng

Session IS01: Advanced Cooperative Work (17:10, room D)
Chair: Jun Munemori, Takashi Yoshino, Takaya Yuizono
Data Selection Interfaces for Knowledge Creative Groupware using Chat Data
Takaya Yuizono, Akifumi Kayano, Jun Munemori
Dual Communication System Using Wired and Wireless in Home-network
Kunihiro Yamada, Takashi Furumura, Kakeru Kimura, Takashi Kaneyama, Kouji Yoshida, Masanori Kojima, Hiroshi Mineno, Tadanori Mizuno
Integrity Maintenance System of Database Query under Updating
Tsukasa Kudou, Nobuhiko Kataoka, Tadanori Mizuno
Proposal of Butler-type service model for personalized service
Norio Yamaguchi, Makoto Okita, Masahiro Itou, Takayuki Shigematsu, Osamu Takahashi, Eiichi Miyamoto
State-Based Pipelining for Reprogramming Wireless Sensor Network
Takuya Miyamaru, Hiroshi Mineno, Yoshiaki Terashima, Yuichi Tokunaga, Tadanori Mizuno

The recommendation system using Mathematical programming model
Masahiko Ishino, Naokazu Yamaki, Teruhisa Ichikawa, Tadanori Mizuno

Verification of the Applicability to Contents Assessment System of the Chat System Using Sense of Touch
Hajime Yoshida, Junko Ito, Jan Munemori, Norio Shiratori

Session IS03: Context-Aware Adaptable Systems and Their Applications (17:10, room D)
Chair: Phill Kyu Rhee, Rezaul Bashar

Predictive and Contextual Feature Separation for Bayesian Metanetworks
Vagan Terziyan

Study on Method of Route Choice Problem Based on User Preference
Woo-Kyung Choi, Seong-Joo Kim, Tae-Gu Kang, Hong-Tae Jeon

September 13

Session GT04: Machine Learning and Classical AI (17:10, room F)
Chair: Floriana Esposito

A Hybrid Symbolic-Statistical Approach to Modeling Metabolic Networks
Marenglen Biba, Stefano Ferilli, Nicola Di Mauro, Teresa M. A. Basile

Sub-Symbolic Mapping of Cyc Microtheories in Data-Driven “Conceptual” Spaces
Giovanni Pilato, Agnese Augello, Mario Scriminaci, Giorgio Vassallo, Salvatore Gaglio

Session GT05: Agent Systems (17:10, room F)
Chair: Ngoc Thanh Nguyen

An Investigation of Agent-Based Hybrid Approach to Solve Flowshop and Job-Shop Scheduling Problems
Joanna Jedrzejowicz, Piotr Jedrzejowicz

Determining Consensus with Dependencies of Set Attributes using Symmetric Difference
Michał Zgrzywa
Network Simulation in a Fragmented Mobile Agent Network
Mario Kusek, Gordan Jezic, Kresimir Jarusovic, Vjekoslav Sinkovic

RSS-based Blog Agents for Educational Applications
Euy-Kyung Hwang, Yang-Sae Moon, Hea-Suk Kim, Jinho Kim, Sang-Min Rhee

Soft Computing Approach to Contextual Determination of Grounding Sets for Simple Modalities
Radostaw P. Ktarzyniak, Ngoc Thanh Nguyen, Lakhmi C. Jain

Toward a Novel Multi-Modal HCI: Fusion Architecture Using Confidence Score and Fuzzy Value
Jung-Hyun Kim, Jeh-Seon Youn, Kwang-Seok Hong

Using Uncertainties as Basis for Evaluating Plans
Christofer Waldenström

Session GT06: Knowledge Based and Expert Systems (17:10, room F)
Chair: Anne Håkansson

A Knowledge Sorting and Matrix Representation Approach for Developing Knowledge-based Product Design Systems
Zhiming Rao, Chun-Hsien Chen

Knowledge Based Industrial Maintenance using Portable Devices and Augmented Reality
Carlos Toro, Cesar Sanín, Javier Vaquero, Jorge Posada, Edward Szczerbicki

Parallel Computations for Logic-Algebraic Based Expert Systems
Leszek Borzemski, Mariusz Fras

Process Control of an Event Filter Farm for a Particle Physics Experiment Based on Expert System Technology
Kristina Marasovic, Bojana Dalbelo-Basic, Vuko Brigljevic

The CTCN Temporal Model for Representing Knowledge in the Sleep Apnea Syndrome Diagnostic Task
Ángel Fernández-Leal, Vicente Moret-Bonillo

Session GT09: Intelligent Vision and Image Processing (17:10, room F)
Chair: Tuan Pham

A Study on the Gesture Recognition based on the Particle Filter
Hyung Kwan Kim, Yang Weon Lee, Chil Woo Lee
Intelligent Monitoring System for Driver's Alertness (A Vision Based Approach)  
Rashmi Parsai, Preeti Bajaj

Real-Time Vision Based Multiple People Gesture Recognition for Human-Robot Interaction  
Seok-ju Hong, Nurul Arif Setiawan, Chil-woo Lee

Step-by-Step Description of Lateral Interaction in Accumulative Computation  
Antonio Fernández-Caballero, Miguel A. Fernández, María T. López, Francisco J. Gómez

Suitability of Edge Segment based Moving Object Detection for Real Time Video Surveillance  
M. Julius Hossain, M. Ali Akber Dewan, Oksam Chae

Session IE03: Artificial Intelligence Applications in Security (17:10, room E1)  
Chair: Emilio Corchado, Rodolfo Zunino

Network-based Anomaly Intrusion Detection Improvement by Bayesian Network and Indirect Relation  
ByungRae Cha, DongSeob Lee

A Data Mining Methodology for Anomaly Detection in Network Data  
Costantina Caruso, Donato Malerba

Session IE04: Artificial Intelligence Methods for Information Processing (AIMIP 2007) (17:10, room D)  
Chair: Lifeng Xi, Kun Gao

A Novel Image Edge Detection Using Fractal Compression  
Liangbin Zhang, Lifeng Xi

A Rapid Algorithm for Computing ST Reliability of Radio-communication networks  
Fei Gao, Xuejun Liu, Hanzhong Liu

A second-order upwind difference scheme for a singularly perturbed problem with integral boundary condition in neural network  
Zhongdi Cen, Xin Cai

Application of Genetic Algorithm to Hausdorff Measure Estimation of Sierpinski carpet  
Qili Xiao, Lifeng Xi

Automated Planning and Replanning in an Intelligent Virtual Environments for Training  
Jaime Ramírez, Dr. Angélica de Antonio
Decomposability of implication operators
Zhudeng Wang

Fault Detecting Technology Based on BP Neural Network Algorithm
Ran Jin, Kun Gao, Zhigang Chen, Chen Dong, Yanhong Zhang, Lifeng Xi

Image Information Hiding Encryption Using Chaotic Sequence
Zhen Liu, Lifeng Xi

Improvement of an Image Encryption Algorithm Based on Combined Multidimensional Chaotic Systems
Chen Dong, Jifang Li, Lifeng Xi, Jie Hao, Ran Jin

Investigation on Fitting Graph Based on Fractal Dimensions Pretreatment
Min Jin, Qin Wang, Xi Lifeng

Practice of Video Encryption Algorithms Based on Chaotic Sequence and Scan Pattern
Qian Li

Research on WebGIS based on Multi-Agent
Taowei Wang, Liangbin Zhang, Aimin Yang

Session IE05: Communicative Intelligence 2007 (17:10, room E2)

Chair: Toyoaki Nishida, Ngoc Thanh Nguyen

A Pattern Recognition Algorithm Used in Knowledge-Based Adaptaive Control System to Select Strategy
Krzysztof Brzostowski, Jerzy Swiatek

A simple model for human-robot emotional interaction
Isabella Cattinelli, N. Alberto Borghese

Alignment-based Preprocessing of Personal Ontologies on Semantic Social Network
Jason J. Jung, Hong-Gee Kim, Geun-Sik Jo

Browser Latency Impact Factors
Andrzej Siemiński

Global Adaptive Request Distribution with Broker
Leszek Borzemsiki, Anna Zatwarnicka, Krzysztof Zatwarnicki

Global and Local Approach to Complex Systems Modeling using Dynamic Neural Networks - Analogy with Multiagent Systems
Drapala, Jaroslaw, Jerzy Świątek
Session IE08: Hybrid Artificial Intelligence Systems Workshop (HAIS07-KES2007) (17:10, room E1)

Chair: Juan M. Corchado, Emilio Corchado

Architecture of an hybrid system for experimentation on Web Information Retrieval incorporating Clustering Techniques
Montserrat Mateos, Carlos G. Figuerola

FreeEnCal: A Forward Reasoning Engine with General-Purpose
Jingde Cheng, Shinsuke Nara, Yuichi Goto

Hybrid Agents Based Architecture on Automated Dynamic Environments
Dante Israel Tapia, Javier Bajo, Juan M. Corchado, Sara Rodríguez, Juan M. Manzano

Learning Topologic Maps with Growing Neural Gas
José García-Rodríguez, Francisco Flórez-Revuelta, Juan Manuel García-Chamizo

Adaptive Mechanisms for Classification Problems with Drifting Data
Zoheir Sahel, Abdelhamid Bouchachia, Bogdan Gabrys, Paul Rogers

Session IE13: Intelligent Automation Systems (17:10, room E2)

Chair: MuDer Jeng

Design of a Simulated Environment for Flexible Manufacturing Systems
Yi-Sheng Huang, Pin-June Su

MyHome: a Residential Server for Smart Homes
Sheng-Luen Chung, Wen-Yuan Chen

Semi-automatic Production Testing of Spark Plugs
Simon D. Walters, Peter A. Howson, Robert J. Howlett

Session IP04: Learning from uncertain data (17:10, room E1)

Chair: Dario Malchiodi

A Neuro-Fuzzy Approach for Sensor Network Data Cleaning
Alfredo Petrosino, Antonino Staiano

Learning Bayesian Networks Using Evolutionary Algorithm and a Variant of MDL Score
Fengzhan Tian, Yanfeng Zhang, Zhihai Wang, Houkuang Huang

SVM with Random Labels
Bruno Apolloni, Simone Bassis, Dario Malchiodi
Session IK03: Knowledge - Based Interface Systems (I)  
(17:10, room E2)  
Chair: Naohiro Ishii, Yuji Iwahori  
DACS Web Service  
Kazuya Odagiri, Rihito Yaegashi, Masaharu Tadauchi, Naohiro Ishii

Session IK04: Knowledge - Based Interface Systems (II)  
(17:10, room E2)  
Chair: Yoshinori Adachi, Nobuhiro Inuzuka  
The Characteristics Evaluation of Stacked-type Electrostatic Actuators by the Neural Network  
Masashi Kawaguchi, Katsuhisa Yamano, Kazuo Okuda, Takashi Jimbo, and Naohiro Ishii

Session IK05: Knowledge and Information Management in Social Community (17:10, room E2)  
Chair: Toyohide Watanabe, Naoto Mukai, Jun Feng  
Building the virtual community to support Interregional exchange between rural and urban  
Yoshida Chiho, Yasuda Takami, Yokoi Shigeki

Session IK10: Knowleged Based Systems for e-business  
(17:10, room E2)  
Chair: Kazuhiko Tsuda, Masakazu Takahashi  
A Proposal of Adequate and Efficient Designing of UML Documents for beginners  
Masakazu Takahashi, Satoru Takahashi, Yoshihatsu Fujita  
An Estimation Method of FAQ Service Quality by Introducing Measurements  
Jun-ichi Aoe (Dept. of Information Science and Intelligent Systems) Elsayed Atlam  
Analysis of the Relation between Stock Price Returns and Headline News Using Text Categorization  
Satoru Takahashi, Masakazu Takahashi, Hiroshi Takahashi, Kazuhiko Tsuda  
Evaluation of a Hierarchical Shaper as a Policy Execution Point  
Takeshi Aimoto, Takeki Yazaki, Takashi Isobe, Yoshihiko Sakata, Kenichi Yoshida
Query Message Delivery over Community-based Overlay Network
Yoshikatsu Fujita, Yasufumi Saruwatari, Jun Yoshida, Kazuhiko Tsuda

Relation Analysis on Information System Life Cycle Processes by KeyGraph Algorithms
Tadashi Tsukahara, Atsuo Hazeyama, Kazuhiko Tsuda

Session IS04: Engineered Applications of Semantic Web - SWEA (17:10, room E2)
Chair: Tommaso Di Noia, Eugenio di Sciascio, Giovanni Semeraro

A Hierarchical Clustering Method for Semantic Knowledge Bases
Nicola Fanizzi, Claudia d’Amato

An Automatic Method for Ontology Mapping
Liya Fan, Tianyuan Xiao

Improving Smart Environments with Knowledge Ecosystems
Fulvio Mastrogiovanni, Antonio Sgorbissa, Renato Zaccaria

SAM: a Semantic Web service discovery system
Antonio Brogi, Sara Corfini

Semantics driven interaction using natural language in students tutoring
Roberto Pirrone, Giovanni Pilato, Riccardo Rizzo, Giuseppe Russo

Towards a domain oriented and independent Semantic Search Model
Zhixian Yan, Ying Ding, Emilia Cimpian

User modeling in the social web
Francesca Carmagnola, Federica Cena, Cristina Gena

Session IS05: Environment Support in Advanced Learning collaboration (17:10, room E2)
Chair: Toyohide Watanabe, Tomoko Kojiri

Filtering of Web Recommendation Lists Using Positive and Negative Usage Patterns
Przemyslaw Kazienko

Immersive Round-table Interface in Collaborative Learning
Yuki Hayashi, Tomoko Kojiri, Toyohide Watanabe
Session IS06: Immunity-based systems (17:10, room E2)

Chair: Yoshiteru Ishida, Giuseppe Nicosia

A Note on Symmetries on Equations of Population Dynamics and Stability Conditions
Yoshiteru Ishida

Experimental analysis of the Aging operator for static and dynamic optimisation problems
Mario Castrogiovanni, Giuseppe Nicosia, Rosario Rascunà

Fuzzy Rule Induction and Artificial Immune Systems in Female Breast Cancer Familiarity Profiling
Filippo Menolascina, Roberto T. Alves, Stefania Tommasi, Patrizia Chiarappa, Myriam Delgado, Vitoantonio Bevilacqua, Giuseppe Mastronardi, Alex A. Freitas, Angelo Paradiso

Performance Evaluation of Immunity-based Diagnosis on Complex Networks
Yuji Watanabe, Yoshiteru Ishida

Symmetries on Asymmetric Wars: Generalists (HIVs) versus Specialists (T-cells)
Yoshiteru Ishida

September 14

Session GT01: Artificial Neural Networks and Connectionists Systems (15:30, room F)

Chair: Ryohei Nakano

A New Neural Network with Adaptive Activation Function for Classification of ECG Arrhythmias
Gülay Tezel, Yüksel Özbay

Boosting Support Vector Machines using Multiple Distances
Ángela Blanco, Manuel Martín-Merino

CSFNN Synapse and Neuron Design using Current Mode Analog Circuitry
Burcu Erkmen, Tülay Yldrm

Fast Fingerprints Classification only using the Directional Image
Vincenzo Conti, Davide Perconti, Salvatore Romano, G.Tona, Salvatore Vitabile, Salvatore Gaglio, Filippo Sorbello

Neural Network Models for Abduction Problems Solving
Viorel Ariton, Doinita Ariton
Session GT02: Granular Computing (15:30, room F)

Chair: Detlef Nauck, Zenho Nakao

ANFIS Based Emotions Recognition in Speech
Shubhangi Giripunje, Narendra Bawane

Binary Particle Swarm Optimization for Black-Scholes Option Pricing
Sanguook Lee, Jusang Lee, D. Shim, Moongu Jeon

Design of Very High-speed Integer Fuzzy Controller without Multiplications by Using VHDL
Sang-gu Lee, Michio Miyazaki, Jin-il Kim

Fuzzy Fusion in Multimodal Biometric Systems
Vincenzo Conti, Giovanni Milici, Patrizia Ribino, Filippo Sorbello, Salvatore Vitabile

Parameter Determination of Induction Machines by Hybrid Genetic Algorithms
Mümtaz Mutluer, Osman Bilgin, Mehmet Cankas

Session GT14: Other Intelligent Systems Applications (15:30, room F)

Chair: Viacheslaw Shkodirev, Floriana Esposito

A Geographic Event Management, Based on Set Operation among Geographic Objects
Masakazu Ikezaki, Toyohide Watanabe, Taketoshi Ushiama

A Method for Judging Illogical Discourse Based on Concept Association and Common-Sense Judgment
Eriko Yoshimura, Noriyuki Okumura, Hirokazu Watabe, Tsukasa Kawaoka

Analysis and Research of Predictive Algorithm in NCS with Time Delay
Zaiping Chen, Rui Lou, Xunlei Yin, Nan Yang, Gang Shao

Determination of Illuminance Level Using ANN Model
Vedat Topuz, Selcuk Atis, Sureyya Kocabey, Mehmet Tektas

Efficient Content Distribution Method based on Location and Similarity in Unstructured P2P System
Suhong Min, Byong Lee, Dongsub Cho

Image Mining Using Wavelet Transform
Sanjay T. Gandhe, Kiran T. Talele, Avinash G. Keskar

Natural Language Understanding for Generating Grasp Actions
Hirokazu Watabe, Seiji Tsuchiya, Yasutaka Masuda, Tsukasa Kawaoka

Particle Swarm Optimization Applied to Vertical Traffic Scheduling in Buildings
Zhonghua Li, Hong-Zhou Tan, Yunong Zhang
Person Identification Using Lip Motion Sequence
Dr. Salina Abdul Samad, Dzati Athiar Ramli, Aini Hussain

Proposal of Method to Judge Speaker’s Emotion based on Association Mechanism
Seiji Tsuchiya, Eriko Yoshimura, Hirokazu Watabe, Tsukasa Kawaoka

The Automatic Peer-to-Peer Signature for Source Address Validation
Yan Shen, Jun Bi, Jianping Wu, Quiang Liu

Traffic Demand Prediction using ANN Simulator
Vedat Topuz

Session IE06: Computation Intelligence for Multimedia Processing and Pattern Recognition (15:30, room E1)
Chair: Yen-Wei Chen

A New Optimization Algorithm of Kinoforms Based on Simulated Annealing
Shinya Nozaki, Yen-Wei Chen, Zensho Nakao

Session IE07: Human Computer Intelligent Systems (15:30, room E1)
Chair: Takumi Ichimura, Kazuya Mera

Reconsideration of the Effectiveness on Extracting Computer Diagnostic Rules by Automatically Defined Groups
Yoshiaki Kurosawa, Akira Hara, Kazuya Mera, and Takumi Ichimura

Session IE11: Intelligent Agents and Their Applications (15:30, room E1)
Chair: Dharmendra Sharma, Wanli Ma, Haeng Kon Kim, Dariusz Król

A Multiagent Based Vehicle Engine Fault Diagnosis
Xiaobing Wu, Xueshan Gao, Dharmendra Sharma

A Multi-Agent Security Framework for e-Health Services
Rossilawati Sulaiman, Dharmendra Sharma, Wanli Ma, Dat Tran

A Proactive Routing Algorithm Based on Bitmap Tables for Wireless Sensor Networks
Sangjoon Jung, Younky Chung

A study on mobile agent based resource management in Grid
Chen Zhao, Jian Yu, Bencheng Chai
An Agent-Based Evolutionary Robotic System for its Reconfiguration
Xueshan Gao, Koki Kikuchi, Xiaobing Wu

Design of the Intelligence User Identification Method for the Improved Password Input Method and the Personality Security
Eun-Ser Lee, Haeng-Kon Kim, Sang Ho Lee

Using Tuple Space to Coordinate Multiagent Activities
Wanli Ma, Dat Tran, Dharmendra Sharma

Session IP05: Neural Information Processing for Data Mining (15:30, room E1)
Chair: Ryohei Nakano, Kazumi Saito

Learning Evaluation Functions of Shogi Positions from Different Sets of Games
Kosuke Inagaki, Ryohei Nakano

Pivot Learning for Efficient Similarity Search
Manabu Kimura, Kazumi Saito, Naonori Ueda

Session IP06: Neural networks: advanced applications (15:30, room E1)
Chair: Eros Pasero

A Kernel Based Learning by Sample Technique for Defect Identification through the Inversion of a Typical Electric Problem
Matteo Cacciola, Maurizio Campolo, Fabio La Foresta, Francesco Carlo Morabito, Mario Versaci

Adaptive Neural Network Approach for Nonlinearity Compensation in Laser Interferometer
Gunhaeng Heo, Wooram Lee, Seungok Choi, Jeehyong Lee, Kwanho You

Handwritten Greek Character Recognition with Learning Vector Quantization
Francesco Camastra

Real Time Reader Device for Blind People
Paolo Motto Ros, Eros Pasero

SVM-based Time Series Prediction with Nonlinear Dynamics Methods
Francesco Camastra, Maurizio Filippone
Session IK06: Knowledge and Ontological Engineering for Intelligent Information System Development (KOS) (15:30, room E2)

Chair: Tatiana Gavrilova, Vyacheslav Shkodyrev

Assisting Dialogical Agents Modeled from Novice Users Perceptions
David Leray, Jean-Paul Sansonnet

Combining Empirical Studies of Audio-Lingual and Visual-Facial Modalities for Emotion Recognition
M. Virvou, G.A., Tsihrintzis, E. Alepis, I.-O. Stathopoulou, K. Kabassi

Semantic Modeling of Product Manuals
Rossitza Setchi, Nikolaos Lagos, Ammar Huneiti

Session IK07: Knowledge Engineering in Multi Robot Systems (15:30, room E2)

Chair: Manuel Graña, Richard Duro

Incremental Evolution of Stigmergy-based Multi Robot Controllers through Utility Functions
P. Caamaño, J.A. Becerra, R. J. Duro, F. Bellas

Lattice Independence and Vision Based Mobile Robot Navigation
I. Villaverde, M. Graña, J.L. Jimenez

Session IK08: Knowledge-Based Creativity Support Systems (15:30, room E2)

Chair: Susumu Kunifuji, Motoki Miura, Kazuo Misue

A Modelling Framework for Sharing Knowledge
Reyes Grangel, Ricardo Chalmeta, Cristina Campos

An Assistant Interface for Finding Query-Related Proper Nouns
Tomoya Iwakura, Kanji Uchino, Seishi Okamoto

Community Support System for Extensive Readers: Case study in a Domain Knowledge Science
Kohei Ishikawa, Kanayo Ogura, Kozo Sugiyama

Development of a mimamori-care system for persons with dementia based on the real world-oriented approach
Kenichi Nakagawa, Taro Sugihara, Hitoshi Koshiba, Ryozo Takatsuka, Naotaka Kato, Susumu Kunifiuj
Session IS02: Behavior Support in Advanced Learning collaboration (15:30, room E2)
Chair: Toyohide Watanabe, Tomoko Kojiri
Organizing Online Learning-Community Based on the Real World Log
Naka Gotoda, Kenji Matsuura, Kazuhide Kanenishi, Yoneo Yano
Context-based Managing and Sharing of Personal Contents on Experience Web
Taketoshi Ushiyama, Toyohide Watanabe

Session IS08: Multi-agent systems design, implementation and applications (15:30, room E2)
Chair: Dharmendra Sharma, Bala. M. Balachandran
A Comparison of Three Agent-Oriented Software Development Methodologies: ROADMAP, Prometheus and MaSE
Ebrahim Al-Hashel, Bala Balachandran, Dharmendra Sharma
A Multi-agent Architecture for RFID Taxonomy
Son Le, Xu Huang, Dharmendra Sharma
Adaptive Binary Splitting for a RFID Tag Collision Arbitration via Multi-Agent Systems
Xu Huang, Dat Tran
Developing Multi-agent E-Commerce Applications with JADE
Bala Balachandran, Majigsuren Enkhsaikhan

Session IS09: Multimedia Systems and its Applications focusing on Reliable and Flexible Delivery for Integrate Multimedia (Media07) (15:30, room E2)
Chair: Yun Ji Na, Il Seok Ko
A New Authentication and Key Agreement Protocol Scheme in Convergence of UMTS and DVB-H Networks
SuJung Yu, JooSeok Song
A Practical Provider Authentication System for Bidirectional Broadcast Service
Takahiro Matsuda, Goichiro Hanaoka, Kanta Matsuura, Hideki Imai
Anonymous Authentication Scheme for Subscription Services
Arisa Fujii, Go Ohtake, Goichiro Hanaoka, Kazuto Ogawa
Anonymous Pay-TV System with Secure Revenue Sharing
Kazuto Ogawa, Goichiro Hanaoka, KazuKuni Kobara, Kanta Matsuura, Hideki Imai
Using Informed Coding and Informed Embedding to Design Robust Fingerprinting Embedding Systems
Joan Tomàs-Buliart, Marcel Fernandez, Miguel Soriano

Session IS11: Recommender agents (15:30, room E2)
Chair: Dariusz Król, Janusz Sobecki

A Process Based on the Representation of End-User Requirements for Generating Adaptable User Interfaces for Browsing XML Content
Benoît Encelle, Nadine Baptiste-Jessel

NBM and WNBM: Algorithms and Evaluation for personalizing information retrieval in METIORE
David Bueno, Ricardo Conejo, Amos A. David, Cristina Carmona

Web-based System User Interface Hybrid Recommendation Using Ant Colony Metaphor
Janusz Sobecki