WI 2008 Welcome Message from Conference Chairs and Program Chair .................................................................xvii

WI'08 and IAT'08 Conference Organization ...........................................................................................................xxi

WI 2008 Program Committee Members ..................................................................................................................xxiv

WI 2008 Reviewers .....................................................................................................................................................xxviii

WI’08 and IAT’08 Joint Invited Talks

Planning for Coordination and Coordination for Planning .........................................................................................1

   Edmund H. Durfee

Service-Oriented Collective Intelligence for Intercultural Collaboration .................................................................4

   Toru Ishida

Knowledge Based Search Engine: Granular Computing on the Web ...........................................................................9

   Tsau Young Lin and Jean-David Hsu

The Emergence of Web Science ................................................................................................................................19

   Nigel Shadbolt

Using Web Clustering for Web Communities Mining and Analysis ...........................................................................20

   Yanchun Zhang and Guandong Xu

Thinking Big - AI at Web Scale ..................................................................................................................................32

   Michael Witbrock

WIC Feature Talk

Autonomy-Oriented Computing for Web Intelligence and Brain Informatics ..........................................................33

   Jiming Liu
WI Foundations: Regular Papers
Dynamic Change Evaluation for Ontology Evolution in the Semantic Web .................................................................34
   I. Palmisano, V. Tamma, L. Iannone, T.R. Payne, and P. Doran
Data-Brain Modeling Based on Brain Informatics Methodology ........................................................................41
   Jianhui Chen and Ning Zhong

WI Foundations: Short Papers
Finding Explanations for Assisting Pattern Interpretation ..............................................................................................48
   Yen-Ting Kuo, Liz Sonenberg, and Andrew Lonie

World Wide Wisdom Web (W4): Regular Papers
Adaptive Processing for Multi-user Stream Service over Web-Based Broadcasting Stream ................................................52
   Mi-Young Kang, Hyeong-Ok Lee, Omar F. Hamad, and Ji-Seung Nam
Answering Any Class of Japanese Non-factoid Question by Using the Web and Example Q&A Pairs from a Social Q&A Website ........................................................................59
   Tatsunori Mori, Mitsuru Sato, and Madoka Ishioroshi

World Wide Wisdom Web (W4): Short Papers
Ant Colony Inspired Self-Healing for Resource Allocation in Service-Oriented Environment Considering Resource Breakdown ..................................................................................................................66
   Rong Zhou, Ren Wei, Gang Chen, Zhonghua Yang, Haifeng Shen, Jingbing Zhang, and Ming Luo

Social Networks and Social Intelligence: Regular Papers
A k-Nearest-Neighbour Method for Classifying Web Search Results with Data in Folksonomies ..........................................................70
   Ching-man Au Yeung, Nicholas Gibbins, and Nigel Shadbolt
Topic Detection and Tracking for Threaded Discussion Communities ...............................................................................77
   Mingliang Zhu, Weiming Hu, and Ou Wu
Encouragement Methods for Small Social Network Services ..............................................................................................84
   Fujio Toriumi, Ken Ishida, and Kenichiro Ishii
Proposal for a Growth Model of Social Network Service ............................................................................................91
   Ken Ishida, Fujio Toriumi, and Kenichiro Ishii
TagScore: Approximate Similarity Using Tag Synopses .................................................................................................98
   Alex Penev and Raymond K. Wong
Discovering and Browsing of Power Users by Social Relationship Analysis in Large-Scale Online Communities ...................................................................................................................105
   Hyoseop Shin, Zhiwei Xu, and Eun-Yi Kim
Social Tagging Behaviour in Community-Driven Question Answering .......................................................................112
   Eduarda Mendes Rodrigues, Natasa Milic-Frayling, and Blaz Fortuna
Bridging the Gap between Qualitative and Quantitative Analysis of Opinion
Forums ......................................................................................................................................................120
  Caroline Kaiser, Birinder S. Tiwana, and Freimut Bodendorf
On Modularity of Social Network Communities: The Spectral Characterization ..............................................127
  Bo Yang, Jiming Liu, Jianfeng Feng, and Dayou Liu
Expertise Analysis in a Question Answer Portal for Author Ranking ...........................................................................134
  Lin Chen and Richi Nayak
Exploring Feedback Models in Interactive Tagging .........................................................................................................141
  Robert Graham and James Caverlee
Exploiting Additional Context for Graph-Based Tag Recommendations in Folksonomy Systems .................................................................148
  Fabian Abel, Nicola Henze, and Daniel Krause
 Ranking Web Pages from User Perspectives of Social Bookmarking Sites ......................................................................155
  Chia-Hao Lo, Wen-Chih Peng, and Meng-Fen Chiang
Enabling Social Navigation on the Web ..................................................................................................................................162
  Athanasios Papagelis, Manos Papagelis, and Christos Zaroliagis
Link Mining for a Social Bookmarking Web Site .................................................................................................................169
  Feilong Chen, Jerry Scripps, and Pang-Ning Tan

Social Networks and Social Intelligence: Short Papers
Overlapping Community Detection in Bipartite Networks .......................................................................................................176
  Nan Du, Bai Wang, Bin Wu, and Yi Wang
 An Analytical Study of Puzzle Selection Strategies for the ESP Game ......................................................................................180
  Ling-Jyh Chen, Bo-Chun Wang, Kuan-Ta Chen, Irwin King, and Jimmy Lee
 An Analytical Approach to Optimizing the Utility of ESP Games .............................................................................................184
  Chien-Wei Lin, Kuan-Ta Chen, Ling-Jyh Chen, Irwin King, and Jimmy H.M. Lee
 Modeling Collaborations Content in Social Network Analysis ....................................................................................................188
  Alessandro Cucchiarelli, Paola Velardi, Fulvio D’Antonio, and Mirco Curzi
 Linking Privacy and User Preferences in the Identity Management for a Pervasive System .................................................................192
  Elizabeth Papadopoulou, Sarah McBurney, Nick Taylor, and M. Howard Williams
 Intelligent Objects to Facilitate Human Participation in Virtual Institutions ...............................................................................196
  I. Rodriguez, A. Puig, M. Esteva, C. Sierra, A. Bogdanovych, and S. Simoff
 Discovering the Dynamics in a Social Memory Network ...........................................................................................................200
  Lin Gao, Jiming Liu, Shiwu Zhang, and Jie Yang
 RATE: A Review of Reviewers in a Manuscript Review Process .........................................................................................204
  Wei Wei, Kam Tong Chan, Irwin King, and Jimmy Ho-Man Lee
Web Mining and Farming: Regular Papers

Empirical Analysis of the Rank Distribution of Relevant Documents in Web Search .................................................................208

Shen Jiang, Sandra Zilles, and Robert Holte

An Automatic Online News Topic Keyphrase Extraction System ..................................................................................................214

Canhui Wang, Min Zhang, Liyun Ru, and Shaoping Ma

Emotion Classification of Online News Articles from the Reader’s Perspective .................................................................220

Kevin Hsin-Yih Lin, Changhua Yang, and Hsin-Hsi Chen

Slog Filtering Based on Writing Consistency ..................................................................................................................................227

Wei Liu, Songbo Tan, Hongbo Xu, and Lihong Wang

Semantic Web Usage Mining by a Concept-Based Approach for Off-line Web Site Enhancements ..................................................234

Sebastián A. Ríos and Juan D. Velásquez

From Web to Map: Exploring the World of Music .........................................................................................................................242

Olga Goussevskaia, Michael Kuhn, Michael Lorenzi, and Roger Wattenhofer

Unsupervised Discovery of Coordinate Terms for Multiple Aspects from Search Engine Query Logs ..................................................249

Masashi Yamaguchi, Hiroaki Ohshima, Satoshi Oyama, and Katsumi Tanaka

Multi-taxonomy: Determining Perceived Brand Characteristics from Web Data ........................................................................258

Scott Spangler, Larry Proctor, and Ying Chen

Leveraging Sentiment Analysis for Topic Detection .......................................................................................................................265

Keke Cai, Scott Spangler, Ying Chen, and Li Zhang

Using Wavelets to Classify Documents .................................................................................................................................272

Geraldo Xexéo, Jano de Souza, Patrícia F. Castro, and Wallace A. Pinheiro

Linked Topic and Interest Model for Web Forums ......................................................................................................................279

Victor Cheng and C.H. Li

U3 - Mining Unordered Embedded Subtrees Using TMG Candidate Generation ........................................................................285

Fedja Hadzic, Henry Tan, and Tharam S. Dillon

Towards Click-Based Models of Geographic Interests in Web Search .......................................................................................293

Ziming Zhuang, Cliff Brunk, Prasenjit Mitra, and C. Lee Giles

Leveraging Web 2.0 Sources for Web Content Classification ..................................................................................................300

Somnath Banerjee and Martin Scholz

Learning Knowledge from Relevant Webpage for Opinion Analysis ..........................................................................................307

Rui Feng Xu, Kam-Fai Wong, Qin Lu, Yunqing Xia, and Wenjie Li

Experience Mining: Building a Large-Scale Database of Personal Experiences and Opinions from Web Documents .............................314

Kentaro Inui, Shuya Abe, Kazuo Hara, Hiraku Morita, Chitose Sao, Megumi Eguchi, Asuka Sumida, Koji Murakami, and Suguru Matsuyoshi

Enriching Multilingual Language Resources by Discovering Missing Cross-Language Links in Wikipedia ..........................................322

Jong-Hoon Oh, Daisuke Kawahara, Kiyotaka Uchimoto, Jun'ichi Kazama, and Kentaro Torisawa

viii
Hybridization of K-Means and Harmony Search Methods for Web Page Clustering .................................................................................................................................329
  Rana Forsati, MohammadReza Meybodi, Mehrdad Mahdavi, and AzadehGhari Neiat

Efficient Mining of Event-Oriented Negative Sequential Rules ..................................................336
  Yanchang Zhao, Huafeng Zhang, Longbing Cao, Chengqi Zhang, and Hans Bohlscheid

A Wavelet-Based Model to Recognize High-Quality Topics on Web Forum ..................................343
  You Chen, Xue-Qi Cheng, and Yu-Lan Huang

A Concept-Driven Automatic Ontology Generation Approach for Conceptualization of Document Corpora ..................................................................................................................352
  Hai-Tao Zheng, Charles Borchert, and Hong-Gee Kim

**Web Mining and Farming: Short Papers**

Discovery of a User Interests on the Internet ..................................................................................359
  Fang Li, Yihong Li, Yanchen Wu, Kai Zhou, Feng Li, and Xinguang Wang

Predicting the News of Tomorrow Using Patterns in Web Search Queries .....................................363
  Kira Radinsky, Sagie Davidovich, and Shaul Markovitch

Discriminating Meaningful Web Tables from Decorative Tables Using a Composite Kernel ...........368
  Jeong-Woo Son, Jae-An Lee, Seong-Bae Park, Hyun-Je Song, Sang-Jo Lee, and Se-Young Park

Co-occurrence Analysis Focused on Blogger Communities ..........................................................372
  Shin-ya Sato, Kensuke Fukuda, Toshio Hirotsu, Satoshi Kurihara, and Toshiharu Sugawara

Relation Classification for Semantic Structure Annotation of Text ..................................................377
  Yulan Yan, Yutaka Matsuo, Mitsuru Ishizuka, and Toshio Yokoi

  Ulli Waltinger and Alexander Mehler

Web User Session Reconstruction Using Integer Programming ...................................................385
  Robert F. Dell, Pablo E. Román, and Juan D. Velásquez

Incremental Collaborative Filtering for Binary Ratings ....................................................................389
  Catarina Miranda and Alípio M. Jorge

Grasping Major Statements and Their Contradictions Toward Information Credibility Analysis of Web Contents ........................................................................................................393
  Daisuke Kawahara, Sadao Kurohashi, and Kentaro Inui

Joint Extraction of Compound Entities and Relationships from Biomedical Literature .......................398
  Cartic Ramakrishnan, Pablo N. Mendes, Rodrigo A.T.S da Gama, Guilherme C.N. Ferreira, and Amit P. Sheth

Cool Blog Identification Using Topic-Based Models .........................................................................402
  Kritsada Sriphaew, Hiroya Takamura, and Manabu Okumura
A Co-occurrence Based Hierarchical Method for Clustering Web Search
Yun Zhang and Boqin Feng .................................................................407

Grouping Categorical Anomalies ......................................................411
Matthew Gebski, Alex Penev, and Raymond K. Wong

XMiner: Mining XML Mediated Schemas .........................................415
Hong-Quang Nguyen, Wenny Rahayu, Kinh Nguyen, and David Taniar

Semantic Patent Clustering for Biomedical Communities ..................419
Khaled Khelif, Aroua Hedhili, and Martine Collard

Mining Financial News for Major Events and Their Impacts on the Market ..................................................423
Anuj Mahajan, Lipika Dey, and Sk. Mirajul Haque

A Classifier-CMAC Neural Network Model for Web Mining ....................427
Somaiyeh Dehghan and Amir Masoud Rahmani

Extracting Concept Hierarchy Knowledge from the Web Based on Property Inheritance and Aggregation ................................................432
Shun Hattori and Katsumi Tanaka

Indexing of Reading Paths for a Structured Information Retrieval on the Web .................................................438
Mathias Géry

Semantics and Ontology Engineering: Regular Papers

DL Reasoning and AI Planning for Web Service Composition ....................445
Freddy Lécué, Alain Léger, and Alexandre Delteil

Fostering Web Intelligence by Semi-automatic OWL Ontology Refinement ................................................454
Johanna Völker and Sebastian Rudolph

Annotating Documents by Wikipedia Concepts ......................................461
Peter Schönhofen

An Ontology Alignment Based on Parse Tree Kernel for Combining Structural and Semantic Information without Explicit Enumeration of Features ................................................468
Jeong-Woo Son, Seong-Bae Park, and Se-Young Park

Adding Provenance and Evolution Information to Modularized Argumentation Models ................................................475
Tudor Groza, Siegfried Handschuh, and John G. Breslin

A Flexible Partitioning Tool for Large Ontologies ...................................482
Anne Schlicht and Heiner Stuckenschmidt

DLDDB2: A Scalable Multi-perspective Semantic Web Repository ....................489
Zhengxiang Pan, Xingjian Zhang, and Jeff Heflin

Growing Fields of Interest - Using an Expand and Reduce Strategy for Domain Model Extraction .................................................496
Christopher Thomas, Pankaj Mehra, Roger Brooks, and Amit Sheth

Formal Semantics-Preserving Translation from Fuzzy ER Model to Fuzzy OWL DL Ontology ................................................503
Fu Zhang, Z.M. Ma, Yanhui Lv, and Xing Wang
An Ontology-Based Framework for Knowledge Retrieval
Xiaohui Tao, Yuefeng Li, Ning Zhong, and Richi Nayak

An Ontology-Based Sentiment Classification Methodology for Online Consumer Reviews
Jantima Polpinij and Aditya K. Ghose

Focused Crawling with Heterogeneous Semantic Information
Rui Huang, Fen Lin, and Zhongzhi Shi

Semantics and Ontology Engineering: Short Papers

A Collaborative Model of Low-Level and High-Level Descriptors for Semantics-Based Music Information Retrieval
Jun Wang, Haojiang Deng, Qin Yan, and Jinlin Wang

Towards Distributed Ontology Reasoning for the Web
Anne Schlicht and Heiner Stuckenschmidt

A Software Framework for Translating ECA Sequences from OWL-DL into Java
W. Mepham and S. Gardner

Enabling a Common and Consistent Enterprise-Wide Terminology: An Initial Assessment of Available Tools
Jayson Durham, Lifford McLauchlan, and Richard Yuster

Using Text Mining to Enrich the Vocabulary of Domain Ontologies
Mirco Speretta and Susan Gauch

Mining the Content of Relational Databases to Learn Ontologies with Deeper Taxonomies
Farid Cerbah

Intelligent Search in Digital Documents
Asad Masood Khattak, Jibran Mustafa, Nabeel Ahmed, Khalid Latif, and Sharifullah Khan

Ontology-Based Personalised and Context-Aware Recommendations of News Items
Iván Cantador, Alejandro Bellogín, and Pablo Castells

Goal Node Search for Semantic Web Source Selection
Abir Qasem, Dimitre A. Dimitrov, and Jeff Heflin

Multi-concept Document Classification Using a Perceptron-Like Algorithm
Clay Woolam and Latifur Khan

Federated ALCI: Preliminary Report
George Voutsadakis, Giora Slutzki, Vasant Honavar, and Jie Bao

Semantic Discovery of the User Intended Query in a Selectable Target Query Language
Carlos Bobed, Raquel Trillo, Eduardo Mena, and Jordi Bernad
Web Agents: Short Papers

Effective Usage of Computational Trust Models in Rational Environments ..................................................583
Le-Hung Vu and Karl Aberer

An Analytic Approach to Reputation Ranking of Participants in Online Transactions .................................................587
Aleksandar Ignjatovic, Norman Foo, and Chung Tong Lee

Web Services: Regular Papers

Resource Planning Heuristics for Service-Oriented Workflows ..................................................................................591
Julian Eckert, Deniz Ertogrul, André Miede, Nicolas Repp, and Ralf Steinmetz

Dynamic Self-Healing for Service Flows with Semantic Web Services ..............................................................598
Wei Ren, Gang Chen, Haifeng Shen, Zhonghua Yang, Jing Bing Zhang, Chor Ping Low, David Chen, and Chengzheng Sun

Semantic Web Service Selection at the Process-Level: The eBay/Amazon/PayPal Case Study ................................605
Ivan Di Pietro, Francesco Pagliarecci, Luca Spalazzi, Annapaola Marconi, and Marco Pistore

MDSM: A Model-Driven Approach to Semantic Service Selection for Collaborative Business Processes ............612
Matthias Klusch, Stefan Nesbigall, and Ingo Zinnikus

hRESTS: An HTML Microformat for Describing RESTful Web Services ..............................................................619
Jacek Kopecký, Karthik Gomadam, and Tomas Vitvar

Abduction and Contraction for Semantic-Based Mobile Dating in P2P Environments ...........................................626
Michele Ruta, Tommaso Di Noia, Eugenio Di Sciascio, and Floriano Scioscia

Web Information Filtering and Retrieval: Regular Papers

Imputed Neighborhood Based Collaborative Filtering .........................................................................................633
Xiaoyuan Su, Taghi M. Khoshgoftaar, and Russell Greiner

The Metadata Triumvirate: Social Annotations, Anchor Texts and Search Queries ...........................................640
Michael G. Noll and Christoph Meinel

Recognizing and Filtering Web Images Based on People’s Existence ..............................................................648
Ou Wu, Haiqiang Zuo, Weiming Hu, Mingliang Zhu, and Shuxiao Li

Quality Information Retrieval for the World Wide Web ..................................................................................655
Milly Kc, Markus Hagenbuchner, and Ah Chung Tsoi

Data Fusion in Information Retrieval Using Consensus Aggregation Operators ..............................................662
Julien Ah-Pine

An Intelligent Technique for Controlling Web Prefetching Costs at the Server Side ..........................................669
Johann Márquez, Josep Domènech, José A. Gil, and Ana Pont
A Novel Language Model Based on Cognition Attention Attenuation in Web Retrieval .................................................................676
   Donglin Cao, Hongbo Xu, Shuo Bai, Xueqi Cheng, and Shaozi Li
Predicting News Story Importance Using Language Features .................................................................683
   Ralf Krestel and Bhaskar Mehta
Nowhere to Hide: Finding Plagiarized Documents Based on Sentence Similarity .................................................................690
   Nathaniel Gustafson, Maria Soledad Pera, and Yiu-Kai Ng
Name Disambiguation Boosted by Latent Topics from Web Directories .................................................................697
   Quang Minh Vu, Atsuhiro Takasu, and Jun Adachi
Improving Prediction Quality in Collaborative Filtering Based on Clustering .................................................................704
   Taek-Hun Kim, Seok-In Park, and Sung-Bong Yang
A Technique for Summarizing Web Reviews ....................................................................................................................711
   Alpana Dubey and Atul Kumar
An Approach to Deep Web Crawling by Sampling .................................................................................................718
   Jianguo Lu, Yan Wang, Jie Liang, Jessica Chen, and Jiming Liu

Web Information Filtering and Retrieval: Short Papers

An Unsupervised Approach to Cluster Web Search Results Based on Word Sense Communities .................................................................725
   Jiyang Chen, Osmar R. Zaïane, and Randy Goebel
TheHotMap.com: Enabling Flexible Interaction in Next-Generation Web Search Interfaces .................................................................730
   Orland Hoeber, Michael Brooks, Daniel Schroeder, and Xue Dong Yang
Evaluating Performance of Recommender Systems: An Experimental Comparison .................................................................735
   François Fouss and Marco Saerens
A Unified Framework for Opinion Retrieval ....................................................................................................................739
   Qingliang Miao, Qiudan Li, and Ruwei Dai
Error Correcting Output Coding-Based Conditional Random Fields for Web Page Prediction .................................................................743
   Yong Zhen Guo, Kotagiri Ramamohanarao, and Laurence A.F. Park
QoS Based Ranking for Web Search .........................................................................................................................747
   Xiangyi Chen and Chen Ding
A Comparison of Re-ranking Methods in Digital Libraries Using User Profiles .................................................................751
   Thanh-Trung Van and Michel Beigbeder
FuzzyFresh: A Fuzzy Logic Approach to the Ranking of Structured Documents .................................................................755
   Joaquin Pérez-Iglesias, Victor Fresno, and José R. Pérez-Agüera
An Entropy-Based Model for Discovering the Usefulness of Online Product Reviews .................................................................759
   Richong Zhang and Thomas Tran
Integrating Structure in the Probabilistic Model for Information Retrieval .................................................................763
   Mathias Gery, Christine Largeron, and Franck Thollard
Tag Normalization and Prediction for Effective Social Media Retrieval .........................................................770
   Ming-Hung Hsu and Hsin-Hsi Chen

Using Skipping for Sequence-Based Collaborative Filtering .................................................................775
   Geoffray Bonnin, Armelle Brun, and Anne Boyer

Supervised Textual Document Classification Using Neuronal Group Learning .............................................780
   Michal Pryczek and Piotr S. Szczepaniak

Long Tail Recommender Utilizing Information Diffusion Theory .....................................................................785
   Masayuki Ishikawa, Peter Geczy, Noriaki Izumi, and Takahira Yamaguchi

The Impact of Contextual Information on the Accuracy of Existing Recommender Systems for Web Personalization .................................................................789
   Marcos A. Domingues, Alípio M. Jorge, and Carlos Soares

HelpMeter: A Nonlinear Model for Predicting the Helpfulness of Online Reviews .............................................793
   Yang Liu, Xiangji Huang, Aijun An, and Xiaohui Yu

An Effective Evidence Theory Based K-Nearest Neighbor (KNN) Classification ............................................797
   Lei Wang, Latifur Khan, and Bhavani Thuraisingham

Subjectively Related Association Term Discovery towards Personalized Web Information Retrieval .................802
   Seung Yeol Yoo

Iterative Neighbourhood Similarity Computation for Collaborative Filtering ..................................................806
   Yun Zhang and Peter Andreae

**Intelligent Human-Web Interaction: Regular Papers**

On Improving Visual-Facial Emotion Recognition with Audio-lingual and Keyboard Stroke Pattern Information .................................................................810
   George A. Tsihrintzis, Maria Virvou, Ioanna-Ourania Stathopoulou, and Efthimios Alepis

A Neural-Network-Based Geographic Tendency Visualization ..........................................................................817
   Hajime Hotta and Masafumi Hagiwara

**Intelligent Human-Web Interaction: Short Papers**

Context-Aware Scenarios for Pervasive Long-Life Learning ........................................................................824
   Cuong Pham-Nguyen and Serge Garlatti

A Study on the Granularity of User Modeling for Tag Prediction ....................................................................828
   E. Frias-Martinez, M. Cebrián, and A. Jaimes

Visualizing Blogosphere Using Content Based Clusters ..............................................................................832
   Jing Gao and Wei Lai

A Context-Sensitive Approach for Web Database Query Results Ranking ......................................................836
   Xiangfu Meng, Z.M. Ma, Ranran Cheng, and Xing Wang
Web Support Systems: Regular Papers

Scalable Dynamic User Preferences for Recommender Systems through the Use of the Well-Founded Semantics ................................................................. 840
Manoela Ilic, João Leite, and Martin Slota

Web Support Systems: Short Papers

An Autonomous System Designed for Automatic Detection and Rating of Film Reviews ................................................................. 847
Grzegorz Dziczkowski and Katarzyna Wegrzyn-Wolska
Web Page Clustering Using a Fuzzy Logic Based Representation and Self-Organizing Maps ............................................................. 851
Alberto P. Garcia-Plaza, Victor Fresno, and Raquel Martinez

Intelligent E-Technology: Regular Papers

Using Agent's Eagerness and Competition in Automated Bidding Strategy ......................................................... 855
Madhu Lata Goyal and Jun Ma
XAL: A Web Oriented Programming Language Based on Timed-Automata ......................................................... 862
Salvatore Campana, Luca Spalazzi, and Francesco Spegni
Integrating Metadata Harvesting with Semantic Search ................................................................. 869
Darina Dicheva, Christo Dichev, and Petko Valtchev

Intelligent E-Technology: Short Papers

A Model of Cognition-Driven Decision Process for Business Intelligence ......................................................... 876
Li Niu and Guangquan Zhang
Discovering the Correlation between Stock Time Series and Financial News ......................................................... 880
Tak-chung Fu, Ka-ki Lee, Donahue Sze, Fu-lai Chung, and Chak-man Ng
Mining Exceptional Activity Patterns in Microstructure Data ................................................................. 884
Yuming Ou, Longbing Cao, Chao Luo, and Li Liu
Matching and Ranking with Hidden Topics towards Online Contextual Advertising ......................................................... 888
Dieu-Thu Le, Cam-Tu Nguyen, Quang-Thuy Ha, Xuan-Hieu Phan, and Susumu Horiguchi
Supporting Customer Searches in E-marketplaces by Means of Fuzzy Logic-Based Machine Learning ......................................................... 892

WI 2008 Others: Regular Papers

Competition vs. Fairness – Analyzing Structured Networks by Means of User Experiments ......................................................... 897
Stephan Schosser, Klemens Böhm, and Bodo Vogt
**WI 2008 Others: Short Papers**

DFCM: Density Based Approach to Identify Outliers and to Get Efficient Clusters in Fuzzy Clustering .................................................................906  
  *Prabhjot Kaur*

Discovering the Scope of Privacy Needs in Collaborative Search ..............................................910  
  *Thorben Burghardt, Erik Buchmann, and Klemens Böhm*

A Human-Web Interaction Based Trust Model for Trustworthy Web Software Development ........................................................................................................914  
  *Jia Hu, Ning Zhong, Shengfu Lu, Haiyan Zhou, and Jiajin Huang*

Evaluating Ontology Modules Using an Entropy Inspired Metric .................................................918  
  *Paul Doran, Valentina Tamma, Ignazio Palmisano, Terry R. Payne, and Luigi Iannone*

Learning Classifiers from Large Databases Using Statistical Queries ............................................923  
  *Neeraj Koul, Cornelia Caragea, Vasant Honavar, Vikas Bahirwani, and Doina Caragea*

Evaluation of the Effects of User-Sensitivity on Text Summarization ...........................................927  
  *Hien Nguyen, Eugene Santos Jr., Russell Jacob, and Nathan Smith*

**Industry & Demo Track Papers**

Mining and Exploring Unstructured Customer Feedback Data Using Language Models and Treemap Visualizations .........................................................932  
  *Cai-Nicolas Ziegler, Michal Skubacz, and Maximilian Viermetz*

Dynamic XML Generation according to a Given Schema .............................................................938  
  *Debarshi Raha*

Comparative Study on M-Commerce Applications in Various Scenarios .......................................943  
  *Simon Fong and Zhuang Yan*

**WI 2008 Author Index** ..................................................................................................................947