**Information Retrieval**

1. Optimizing web search using web click-through data

**Keywords:** Click-through, Data, Iterative Algorithm, Log Mining, Search Engine

1. Web Query Recommendation via Sequential Query Prediction

**Keywords:** [mixture variable memory Markov model](http://ieeexplore.ieee.org/search/searchresult.jsp?matchBoolean=true&queryText=%22Index%20Terms%22:.QT.mixture%20variable%20memory%20Markov%20model.QT.&newsearch=true), [Query recommendation](http://ieeexplore.ieee.org/search/searchresult.jsp?matchBoolean=true&queryText=%22Index%20Terms%22:.QT.Query%20recommendation.QT.&newsearch=true), [sequential query prediction](http://ieeexplore.ieee.org/search/searchresult.jsp?matchBoolean=true&queryText=%22Index%20Terms%22:.QT.sequential%20query%20prediction.QT.&newsearch=true)

1. Personalized Web search for improving retrieval effectiveness

**Keywords:** Category Hierarchy, Information Filtering, Personalization, Retrieval Effectiveness, Search Engine

1. Hierarchical Clustering Algorithms for Document Datasets

**Key words:** hierarchical clustering, criterion function, constrained agglomerative clustering, data mining

**Image processing**

1. Multiscale AM-FM Demodulation and Image Reconstruction Methods With Improved Accuracy

**Keywords:** Amplitude-modulation frequency-modulation, (AM-FM), image demodulation, multiscale image analysis.

1. [Rate-Distortion Optimized Bitstream Extractor for Motion Scalability in Wavelet-Based Scalable Video Coding](http://ieeexplore.ieee.org/document/5361377/)

**Keywords:** scalable video coding, Bitstream extractor, motion scalability, rate distortion optimization

1. Fusing Local Patterns of Gabor Magnitude and Phase for Face Recognition

**Keywords:** local Gabor XOR patterns (LGXP), Face representation,

Fisher's linear discriminant (FLD), fusion, histogram

**Security**

1. Steganography in Inactive Frames of VoIP Streams Encoded by Source Codec
2. Low-Rate DDoS Attacks Detection and Traceback by Using New Information Metrics
3. Captcha as Graphical Passwords—A New Security Primitive Based on Hard AI Problems
4. A Game Theoretical Framework on Intrusion Detection in Heterogeneous Networks
5. A Hypothesis Testing Approach to Semifragile Watermark-Based Authentication

**Wireless sensor Network**

1. A New Approach for Time Synchronization in Wireless Sensor Networks: Pairwise Broadcast Synchronization
2. mproved Resource Management through User Aggregation in Heterogeneous Multiple Access Wireless Networks
3. Performance Analysis of Slotted Carrier Sense IEEE 802.15.4 Medium Access Layer
4. Cross-Layer Fair Bandwidth Sharing for Multi-Channel Wireless Mesh Networks

**Machine learning**

1. Decision tree approach for classification of remotely sensed satellite data using open source support
2. Parallel Formulations of Decision-Tree Classification Algorithms

### [Subsumption resolution: an efficient and effective technique for semi-naive Bayesian learning](https://link.springer.com/article/10.1007/s10994-011-5275-2)

### [An improved artificial bee colony algorithm for solving constrained optimization problems](https://link.springer.com/article/10.1007/s13042-015-0357-2)

### [Graph based semi-supervised learning via label fitting](https://link.springer.com/article/10.1007/s13042-015-0458-y)