PAKDD 2009

The 13th Pacific-Asia Conference on Knowledge Discovery and Data Mining

PROGRAM

27-30 April 2009 • Bangkok, Thailand

Table of Contents

Welcome Message from the General Chairs

The Pacific-Asia Conference on Knowledge Discovery and Data Mining has been held annually since 1997. PAKDD 2009, the 13th in the series, is held in Bangkok, Thailand during April 27-30, 2008. PAKDD provides an international forum for researchers and industry practitioners to share their new ideas, original research results and practical development experiences from all knowledge discovery-related areas including data mining, data warehousing, machine learning, databases, statistics, knowledge acquisition and automatic scientific discovery, data visualization, causal induction and knowledge-based systems.

For PAKDD 2009, we received 338 research papers from various countries and regions in Asia, Australia, North America, South America, Europe, and Africa. Every submission was rigorously reviewed by at least three reviewers with a double-blind protocol. The initial results were discussed among the reviewers and finally judged by the Program Committee Chairs. When there was a conflict, an additional review was provided by Program Committee Chairs. The Program Committee members were deeply involved in the highly selective process. As a result, only 39 papers (approximately 11.5% of the 338 submitted papers) were accepted as regular papers, 73 papers (21.6% of them) were accepted as short papers.

The PAKDD 2009 conference program also includes 5 workshops, 3 keynote speeches and 4 tutorials. The 5 workshops are: the Pacific Asia Workshop on Intelligence and Security Informatics (PAISI 09), Advances and Issues in Biomedical Data Mining (AIBDM 09), Data Mining with Imbalanced Classes and Error Cost (ICEC 09), Open Source in Data Mining (OSDM 09), and Quality Issues, Measures of Interestingness and Evaluation of data mining models (QIMIE 09).
Prof. Guang-Zhong Yang, from the Imperial College London, gives an interesting keynote speech on future perspective usage of knowledge discovery and data mining in body sensor networks (BSN) for pervasive sensing. Prof. Jeffrey Yu Xu, in his keynote speech, points out problems and methods related to finding hidden structural information efficiently in large relational databases by viewing a relational database as a large directed graph where nodes represent tuples and edges foreign key references between tuples in the

database. Finally, Dr. Andrew Tomkins provides perspective and challenges of search to cope with quickly increasing contents, diversifying in creation, consumption and nature.

In the tutorial session, Dr. Longbing Cao gives a lecture on domain-driven data mining towards actionable knowledge delivery, Dr. Sourav S. Bhowmick presents the mining evolution of complex structured data, Drs. Shou-de Lin, Hung-Yi Lo, and Cheng-Te Li show some issues and their solutions of mining heterogeneous social networks, and Drs. Hans-Peter Kriegel, Peer Kröger, Arthur Zimek provide a number of outlier detection techniques.

PAKDD 2009 would not have been successful without the support of the Steering, the Program and other Committee members, reviewers, workshop organizers, tutorial speakers, keynote speakers, competition organizers as well as organizing and support staff. Particularly, we wish to thank Thanaruk Theeramunkong, Boonserm Kijsirikul, Nick Cercone, and Ho Tu Bao, Program Committee Co-Chairs, Vincent S. Tseng and Shusaku Tsumoto, Tutorial Co-Chairs, Manabu Okumura and Bernhard Pfahringe, Workshop Co-Chairs, and Chotirat Ratanamahatana, Local Arrangement Chair.

We greatly appreciate the support from various institutions: Sirindhorn International Institute of Technology (SIIT), Thammasat University (TU), conference organizer, and Department of Computer Engineering, Faculty of Engineering, Chulalongkorn University (CU), and the Asian Institute of Technology (AIT), conference co-organizers. The conference was sponsored by the National Electronics and Computer Technology Center (NECTEC, Thailand), the Thailand Convention and Exhibition Bureau (TCEB), and the Air Force Office of Scientific Research/Asian Office of Aerospace Research and Development (AFOSR/AOARD). Their sponsorships are highly appreciated. We also wish to thank all authors and all conference participants for their contribution and support.

Finally, we hope all participants would enjoy PAKDD 2009 as well as their stay in Bangkok.

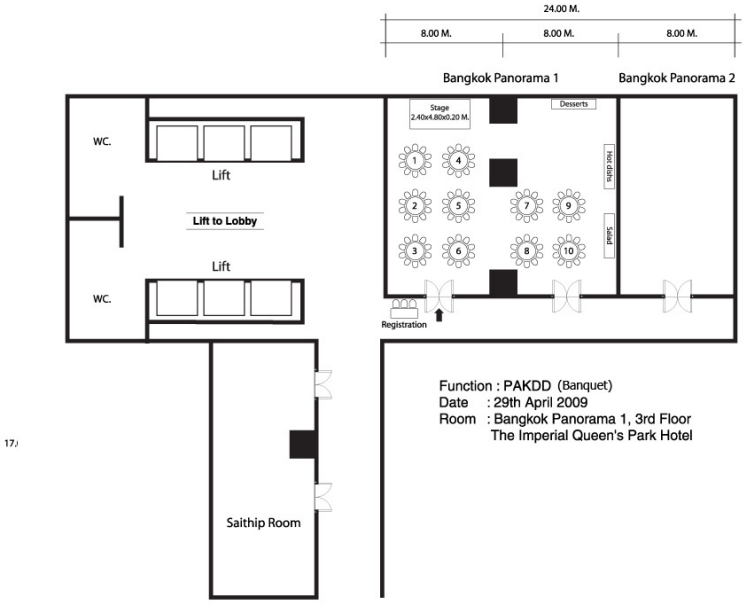
April 2009

Masaru Kitsuregawa (Tokyo University, Japan)
Vilas Wuwongse (Asian Institute of Technology, Thailand)

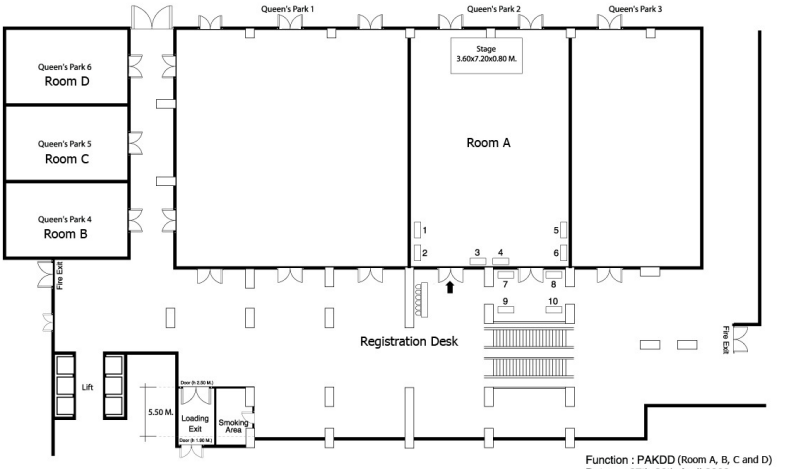
Map of the Conference Site

Room List	
Room A	Queen's Park 2 (2nd floor)
Room B	Queen's Park 4 (2nd floor)
Room C	Queen's Park 5 (2nd floor)
Room D	Queen's Park 6 (2nd floor)
Reception	Sakura (37th floor)
Banquet	Queen's Park 3 (2nd floor)

1st Floor Plan

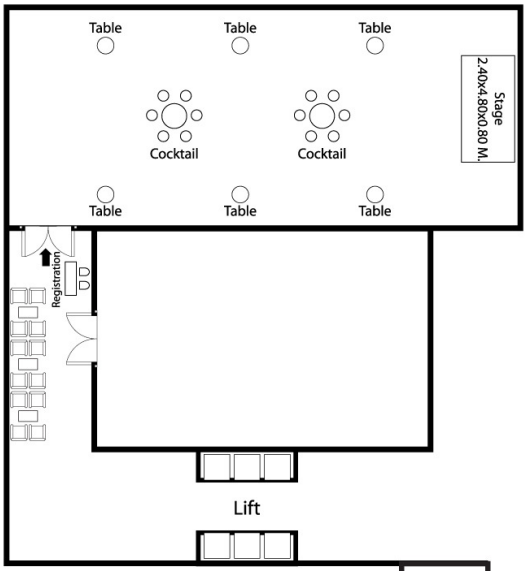


2nd Floor Plan



Function : PAKDD (Room A, B, C and D)
Date : 27th-30th April 2009
Room : Queen's Park 2, 2nd Floor
The Imperial Queen's Park Hotel

37th Floor Plan



Function : PAKDD (Reception)
Date : 27th April 2009
Room : Sakura Room, 37th Floor
The Imperial Queen's Park Hotel

PAKDD 2009 Program Overview

April 27, 2009 (Workshops and Reception)		
Workshop	**Time**	**Room**
PAISI'09	08:30 – 17:30	Room B
ICEC'09	08:30 – 12:30	Room C
QIMIE'09	13:30 – 17:30	
AIBDM'09	08:30 – 12:00	Room D
OSDM'09	13:00 – 18:30	
Reception	19:00 – 22:00	Sakura (37th floor)

April 28, 2009				
	Room A	**Room B**	**Room C**	**Room D**
08:30 - 09:00	Opening (Room A)			
09:00 - 10:00	Keynote Speech: KDD for BSN – towards the future of pervasive sensing: Guang-Zhong Yang, PhD, Imperial College London (Room A)			
10:00 - 10:20	Coffee Break			
10:20 - 12:00	Session 1A Classification 1	Session 1B Privacy Preserving Data Mining	Session 1C Text Mining 1	Tutorial 1
12:00 - 13:00	Lunch			
13:00 - 14:40	Session 2A Semi-Supervised Learning and SVM	Session 2B Clustering 1	Session 2C Sequence Data Mining	Tutorial 2 (14.00-17.00)
14:40 - 15:00	Coffee Break			

15:00 - 17:00	Session 3A Statistical Methods and Ensemble	Session 3B Rule Discovery	Session 3C Pattern Mining	Tutorial 2 (Cont.)

April 29, 2009				
	Room A	**Room B**	**Room C**	**Room D**
08:30 - 10:00	Session 4A Clustering 2	Session 4B Web Mining 1	Session 4C Text Mining 2	Tutorial 3 (9.00-12.00)
10:00 - 10:20	Coffee Break			
10:20 - 12:00	Session 5A Outlier Detection	Session 5B Statistical Methods	Session 5C Recommendation Systems	Tutorial 3 (Cont.)
12:00 - 13:00	Lunch			
13:00 - 14:00	Keynote Speech: Finding Hidden Structures in Relational Databases: Yu Xu, Jeffrey, BE, ME, PhD (Room A)			
14:00 - 15:40	Session 6A Outlier Detection and Spatial Data Mining	Session 6B Ensemble Methods	Session 6C Link Analysis	Tutorial 4 (14.00-17.00)
15:40 - 16:00	Coffee Break			
16:00 - 18:00	Session 7A Feature Selection and Construction	Session 7B Stream and Time-series Data Mining	Session 7C Support Vector Machines	Tutorial 4 (Cont.)
18:30 - 20:30	Banquet			

April 30, 2009				
	Room A	**Room B**	**Room C**	**Room D**
09:00 - 10:00	Keynote Speech: The future of search: an online content perspective: Andrew Tomkins, PhD (Room A)			
10:00 - 10:20	Coffee Break			
10:20 - 12:00	Session 8A Classification and Link Analysis	Session 8B Web Mining 2	Session 8C Text Mining 3	
12:00 - 13:00	Lunch			
13:00 - 16:00	Excursion			

Workshop Schedule

Date: April 27,2009

Advances and Issues in Biomedical Data Mining (AIBDM'09)

Place: Room D, Queen's Park 6 (2nd floor) : 08:30 – 12:00

Chair: Junbin Gao Sturt University, Australia
Paul Kwan University of New England,
Josiah Poon University of Sydney, Australia
Simon Poon University of Sydney, Australia

Data Mining when classes are imbalanced and errors have costs (ICEC'09)

Place: Room C, Queen's Park 5 (2nd floor) : 08:30 – 12:30

Chair: Nitesh Chawla University of Notre Dame, France
Nathalie Japkowicz University of Ottawa, Canada
Zhi-Hua Zhou Nanjing University, China

Pacific Asia Workshop on Intelligence and Security Informatics (PAISI'09)

Place: Room B, Queen's Park 4 (2nd floor) : 08:30 – 17:30

Chair: Hsinchun Chen The University of Arizona, USA
Chris Yang Drexel University, USA
Michael Chau The University of Hong Kong, Hong Kong
Shu-hsing Li National Taiwan University, Taiwan

Open Source in Data Mining (OSDM'09)

Place: Room D, Queen's Park 6 (2nd floor) : 13:00 – 18:30

Chair: Peter Christen The Australian National University, Australia
Graham Williams Togaware, Australia

Quality issues, measures of interestingness and evaluation of data mining models (QIMIE'09)

Place: Room C, Queen's Park 5 (2nd floor) : 13:30 – 17:30

Chair: Stéphane Lallich ERIC, Université Lyon 2
Philippe Lenca Lab-STICC, TELECOM Bretagne

PAKDD 2009 Thai Track Session

The Thai track session facilitates Thai researchers and practitioners in all KDD-related areas to share their new ideas, original research results and practical development experiences with international researchers and experts. The topics include data mining, data warehousing, machine learning, databases, statistics, knowledge acquisition and automatic scientific discovery, data visualization, causal induction and knowledge-based systems. In this special poster session, a high-quality paper is invited to submit to the Thai Track Session.

Place: a poster corner in front of room A

Tutorials Schedule

April 28, 2009	
Tutorial 1	10:22-12:00 (Room D)
Domain-Driven Data Mining: Empowering Actionable Knowledge Delivery *Longbing Cao*	
Tutorial 2	14:00-17:00 (Room D)
Mining Evolution of Complex Structured Data *Sourav S Bhowmick*	
April 29, 2009	
Tutorial 3	09:00 – 12:00 (Room D)
Issues of Mining for Heterogeneous Social Networks *Shou-De Lin, Hung-Yi Lo and Cheng-Te Li*	
Tutorial 4	14:00 – 17:00 (Room D)
Outlier Detection Techniques *Hans-Peter Kriegel, Peer Kröger and Arthur Zimek*	

Longbing Cao
Associate Professor

http://www-staff.it.uts.edu.au/~lbcao/

Tutorial 1

Domain-Driven Data Mining: Empowering Actionable Knowledge Delivery

Short Biography

Dr. Longbing Cao is an Associate Professor in the Faculty of Engineering and Information Technology (FEIT), at the University of Technology, Sydney (UTS), Australia. He is the Director of the Data Sciences & Knowledge Discovery Research Lab at the Centre for Quantum Computation and Intelligent Systems (QCIS) at UTS. He is also the Research Leader of the Data Mining Program at the Capital Markets Cooperative Research Centre, Australia. His research interests focus on data mining, multi-agent systems, and the integration of agents and data mining. He is a Senior Member of the IEEE Computer Society and SMC Society. He has over 100 publications, including monographs and edited books. He has led the investigation of around 20 research and industry projects in data mining and intelligent systems. His real-world experience and leadership covers domains such as telecommunications, capital markets, social security, health insurance and e-commerce. He has served as an organiser and program committee member on over 30 international conferences and workshops in data mining and multi-agent systems.

Sourav S Bhowmick
Associate Professor

http://www3.ntu.edu.sg/home/assourav/

Tutorial 2

Mining Evolution of Complex Structured Data

Short Biography

Sourav S Bhowmick is an Associate Professor in the School of Computer Engineering, Nanyang Technological University and the Director of Centre for Advanced Information Systems (CAIS). He is currently Visiting Associate Professor at the Biological Engineering Division, Massachusetts Institute of Technology (MA, USA). He also holds the position of Singapore-MIT Alliance (SMA) Fellow in Computation and Systems Biology program (2005 - 2010). Sourav received his Ph.D. in computer engineering in 2001. His current research interests include tree and graph data management, systems biology data management, web data management and data mining. He has published more than 100 papers in major international database and data mining conferences and journals such as VLDB, IEEE ICDE, ACM WWW, ACM SIGMOD, ACM SIGKDD, ACM CIKM, ER, PAKDD, IEEE TKDE, ACM CS, Information Systems, and DKE.

Sourav's key research contributions are summarized as follows.

a) His research team is the first the undertake a systematic study on mining structural evolution of tree-structured data. This work received "Best Interdisciplinary Paper Award" in ACM CIKM 2004. Subsequently, they proposed solutions to series of novel problems related to mining evolution of tree and graph structured data. Some of these works were published in ACM WWW 2006 and 2007, ACM SIGKDD 2006, ACM CIKM 2005, 2008.

b) His team was the first to build a system called XBLEND that blends XML query processing with XML query formulation to turbo-charge query performance by exploiting the latency offered by visual interfaces. The results of this work were published in ICDE 2006, DASFAA 2007, and ICDE 2009.
c) He and his graduate student also developed a system called XANADUE that is the first to detect changes to XML data using relational backends. The research results were first published in DEXA 2004 and subsequently in ACM CIKM 2005, ER 2006, and SIGMOD 2007.

Shou-De Lin
Assistant Professor

http://www.csie.ntu.edu.tw/~sdlin/

Hung-Yi Lo
Ph.D. Student

http://www.iis.sinica.edu.tw/~hungyi/

Cheng-Te Li
Master Student

http://avatar.cs.nccu.edu.tw/~relief/index.html

Tutorial 3

Issues of Mining for Heterogeneous Social Networks

Short Biography

Prof. Shou-de Lin holds a BS in EE from National Taiwan University, an MS-EE from the University of Michigan, and an MS in Computational Linguistics and PhD in Computer Science both from the University of Southern California. In 2007, he joined the Computer Science and Information Engineering Department of National Taiwan University as an assistant professor. He leads the Machine Discovery and Social Network Mining Lab in NTU. Before joining NTU, he was a post-doctoral research fellow in the Information Science Group at the Los Alamos National Lab. Prof.

Lin's research aims to design intelligent systems for information processing, which generally includes the areas of knowledge discovery and data mining, natural language processing, social network analysis and machine learning. His international recognition includes the best paper award in IEEE Web Intelligent conference 2003, 2nd place in KDDCup 2003, Google Research Award in 2007, and leader of KDDCUP08 winning team. Prof. Lin has several conference and journal publications about heterogeneous social network mining (including his Ph.D. Thesis "Modeling, Searching and Explaining Interesting Instances in Multi-Relational Networks"), and is the PI of over five funded projects about social network mining. He is also the associated editor of International Journal of Social Network Mining (IJSNM) and secretary general of Taiwanese Association for Artificial Intelligence.

Hung-Yi Lo is a Ph.D. student in the Computer Science and Information Engineering Department of National Taiwan University. He is one of the major contributors in NTU's ACM KDDCUP 2008 winning team. His research interests are in social network mining, machine learning, and speech recognition.

Cheng-Te Li is a 2nd year Master student of Graduate Institute of Networking and Multimedia of National Taiwan University. His research concentrates on social network mining, graph mining, and multimedia mining.

Hans-Peter Kriegel
Professor

http://www.dbs.informatik.uni-muenchen.de/Mitarbeiter/kriegel.html

Peer Kröger
Lecturer

http://www.dbs.informatik.uni-muenchen.de/Mitarbeiter/kroegerp.html

Arthur Zimek
Post-Doctoral Researcher

http://www.dbs.informatik.uni-muenchen.de/Mitarbeiter/zimek.html

Tutorial 4

Outlier Detection Techniques

Short Biography

Hans-Peter Kriegel is a full professor for database systems and data mining in the Department "Institute for Informatics" at the Ludwig-Maximilians-Universitaet Muenchen, Germany and has served as the department chair or vice chair over the last years. His research interests are in spatial and multimedia database systems, particularly in query processing, performance issues, similarity search, high-dimensional indexing as well as in knowledge discovery and data mining. Kriegel received his MS and Ph.D. in 1973 and 1976, respectively, from the University of Karlsruhe, Germany. Hans-Peter Kriegel has been chairman and program committee member in many international database and data mining conferences. He has

published over 200 refereed conference and journal papers, and he received the "SIGMOD Best Paper Award" 1997 and the "DASFAA Best Paper Award" 2006 together with members of his research team.

Peer Kröger has a tenured position at the rank of an assistant professor in the database systems and data mining group at the Ludwig-Maximilians-Universitaet Muenchen, Germany. He finished his PhD thesis on clustering moderate-to-high dimensional data in summer 2004 and his Habilitation on data mining and similarity search in scientific data in spring 2009. His research interests are in data mining and similarity search in high dimensional multimedia and biomedical data.

Arthur Zimek is a postdoc in the database and data mining group of Hans-Peter Kriegel at the Ludwig-Maximilians-Universitaet Muenchen, Germany. He finished his PhD thesis on clustering high dimensional data in summer 2008. His research interests include data mining for high dimensional data and structured data especially for bioinformatics applications.

Keynote and Invited Speakers

April 28, 2009	
Keynote	9:00-10:00 (Room A)
KDD for BSN – towards the future of pervasive sensing *Guang-Zhong Yang, PhD*	
April 29, 2009	
Keynote	13:00-14:00 (Room A)
Finding Hidden Structures in Relational Databases *Yu Xu, Jeffrey, BE, ME, PhD*	
April 30, 2009	
Keynote	9:00 – 10:00 (Room A)
The future of search: an online content perspective *Andrew Tomkins, PhD (Yahoo! Research)*	

Guang-Zhong Yang, PhD

Imperial College London

http://www.doc.ic.ac.uk/~gzy/

Topic

KDD for BSN – towards the future of pervasive sensing

Abstract

With increasing sophistication and miniaturisation of wireless sensor technologies, integrated microsensors no more than a few millimetres in size combined with onboard processing and wireless data transfer has become a reality. The provision of "ubiquitous" and "pervasive" monitoring of physical, physiological, and biochemical parameters in any environment and without activity restriction and behaviour modification is the primary motivation of Body Sensor Network (BSN) research. The general scope of BSN is broad, ranging from monitoring of patients with chronic disease and care for the elderly, to general well-being monitoring and performance evaluation in sports. It also has important applications in gaming and human-computer-interaction. One of the significant challenges of BSN is the provision of context aware sensing with effective multi-sensor fusion, data inferencing, mining, and trend analysis. Other research issues currently being addressed include novel miniaturised bioelectrical, biochemical, biophysical, and mechanical sensors; low power RF transceiver, energy scavenging, and battery technologies; biocompatibility, materials, system integration and miniaturisation; autonomic sensor networks and light-weight communication protocols and standards. This talk will address some of the key research topics and current advances in BSN, particularly those related to the KDD community. It will also cover the use of bio-inspired design for providing distributed inferencing and ultra-low power on-node processing, demonstrating how this alternate paradigm based on the strategies used by biological systems can be

used to deal with the challenges of scale, complexity, heterogeneity, and uncertainty involved in pervasive sensing.

Short Biography

Professor Guang-Zhong Yang received Ph.D. in Computer Science from Imperial College London and is Director and Founder of the Royal Society/Wolfson MIC Laboratory at Imperial College. His main research interest is in biomedical imaging, sensing and robotics. He has published over 250 original research articles including over 150 peer reviewed academic journal papers on these topics. He is widely regarded as a pioneer of Body Sensor Networks (BSN), which is attracting increasingly significant international focus. Professor Yang currently heads the Centre for Pervasive Sensing at Imperial College and has led some of the major developments internationally in BSN. He has developed a range of wireless, pervasive sensing platforms including the miniaturised e-AR sensor featured at the 2007 Royal Society Summer Science Exhibition and the BA Festival of Science, and received a Medical Futures Translational Research Innovation Award. He is Fellow of the IET and a recipient of the Royal Society Research Merit Award and the ISMRM I.I Rabi Award.

Yu Xu, Jeffrey, BE, ME, PhD

The Chinese University of Hong Kong

http://www.se.cuhk.edu.hk/people/yu.html

Topic

Finding Hidden Structures in Relational Databases

Abstract

Relational database management systems have been widely used over decades. An important research issue is to find hidden structural information in large relational databases. By hidden structural information we mean the information that cannot be easily found using a traditional query language SQL. In this talk, we discuss how to find hidden structural information in a relational database by viewing a relational database as a large directed graph where nodes represent tuples and edges represent foreign key references between tuples in the database. We discuss how to find trees and communities in such a large graph for user-given keywords. We also discuss how to find frequent and additional keywords associated with the structures identified in a relational database using SQL.

Short Biography

Dr Jeffrey Xu Yu is a Professor in the Department of Systems Engineering and Engineering Management, the Chinese University of Hong Kong. His current main research interests include keywords search in relational databases, graph mining, graph query processing, and graph pattern matching. Dr. Yu served/serves in over 150 organization committees and program committees in international conferences/workshops. Dr. Yu also served as an associate editor of IEEE Transactions on Knowledge and Data Engineering (2004-2008), and servers in VLDB Journal editorial board and ACM SIGMOD

executive committee. He has published over 190 papers including papers published in reputed journals and major international conferences.

Andrew Tomkins, PhD

Yahoo! Research

http://www.tomkinshome.com/andrew/
http://research.yahoo.com/bouncer_user/11

Topic

The future of search: an online content perspective

Abstract

Nonprofessional creation of public online content has outstripped professional content creation of all forms, both online and offline. And two orders of magnitude more content is created daily to flow through social networks, with as much as two more orders of magnitude still to come as user engagement increases. Content is diversifying in creation, consumption, and nature. Web search engines provide rapid targeted access to this page content, and increasingly to other information such as news articles, weather, movie showtimes, and product and restaurant listings. In this talk, I'll discuss these trends from the standpoint of the search engine, I'll cover some research results in this area, and I'll close with some challenges for the future.

Short Biography

Research in 2005 from IBM. His research over the last eight years has focused on measurement, modeling, and analysis of content, communities, and users on the World Wide Web. Prior to joining Yahoo! Research, he managed the "Information Management Principles" group at IBM's Almaden Research Center, and served as Chief Scientist on the WebFountain project. Andrew received Bachelors degrees in Mathematics and Computer Science from MIT, and a PhD in CS from Carnegie Mellon University.

PAKDD 2009 Data Mining Competition

The 13th Pacific-Asia Knowledge Discovery and Data Mining conference (PAKDD 2009) is pleased to host another data mining competition, co-organized by NeuroTech Ltd. and Center for Informatics of the Federal University of Pernambuco (Brazil).

Competitions in scientific events have been organized world-wide for stimulating the application of state-of-the-art approaches to real world problems. In recent years, PAKDD has organized several data mining competitions and this year presents a problem on the well known application of credit scoring. The main novelty is the LeaderBoard for stimulating the competitors' participation by assessing and ranking their preliminary solutions on an unofficial data set.

The competition is open for academia and industry. The only ineligible participants are staff and students from Center for Informatics of the Federal University of Pernambuco and NeuroTech Ltd.

Date: **April 30, 2009 (10.20-12.00)**
Place: **Room D**

PAKDD 2009 Program

April 28, 2009		
	Room A	**Room B**
08:30 - 09:00	**Opening (Room A)**	
09:00 - 10:00	**Keynote Speech: KDD for BSN – towards the future of pervasive sensing Guang-Zhong Yang, PhD, Imperial College London (Room A)**	
10:00 - 10:20	**Coffee Break**	
10:20 - 12:00	**Session 1A** **Classification 1**	**Session 1B** **Privacy Preserving Data Mining**
	DTU: A Decision Tree for Uncertain Data (Regular) Biao Qin, Yuni Xia, and Fang Li	Efficient Privacy-Preserving Link Discovery (Regular) Xiaoyun He, Jaideep Vaidya, Basit Shafiq, Nabil Adam, Evimaria Terzi, and Tyrone Grandison
	Safe-Level-SMOTE: Safe-Level-Synthetic Minority Over-sampling TEchnique for handling the class imbalanced problem Chumphol Bunkhumpornpat, Krung Sinapiromsaran, and Chidchanok Lursinsap	On Link Privacy in Randomizing Social Networks (Regular) Xintao Wu, and Xiaowei Ying
	Using Highly Expressive Contrast Patterns for Classification - Is It Worthwhile? Elsa Loekito, and James Bailey	Accurate Synthetic Generation of Realistic Personal Information Peter Christen, and Agus Pudjijono
	Arif Index for Predicting the Classification Accuracy of Features and its Application in Heart Beat Classification Problem Muhammad Arif, Fayyaz Afsar, Muhammad Usman Akram, and Adnan Fida	An Efficient Approximate Protocol for Privacy-Preserving Association Rule Mining Jaideep Vaidya, Murat Kantarcioglu, and Robert Nix
	UCI++: Improved Support for Algorithm Selection Using Datasetoids Carlos Soares	
12:00 - 13:00	**Lunch**	

April 28, 2009		
	Room C	**Room D**
08:30 - 09:00	**Opening (Room A)**	
09:00 - 10:00	**Keynote Speech: KDD for BSN – towards the future of pervasive sensing** **Guang-Zhong Yang, PhD, Imperial College London (Room A)**	
10:00 - 10:20	**Coffee Break**	
10:20 - 12:00	**Session 1C** **Text Mining 1**	**Tutorial 1**
	Sentence-Level Novelty Detection in English and Malay (Regular) Agus Trisnajaya Kwee, Flora S Tsai, and Wenyin Tang	**Domain-Driven Data Mining: Empowering Actionable Knowledge Delivery** by Longbing Cao
	Information Extraction from Thai Text with Unknown Phrase Boundaries Peerasak Intarapaiboon, Ekawit Nantajeewarawat, and Thanaruk Theeramunkong	
	Newistic: a distributed news gathering and analysis platform Horatiu Mocian, and Ovidiu Dan	
	A Hybrid Approach to Improve Bilingual Multiword Expression Extraction Jianyong Duan, Mei Zhang, Lijing Tong, and Feng Guo	
	Addressing the Variability of Natural Language Expression in Sentence Similarity with Semantic Structure of the Sentences Palakorn Achananuparp, Xiaohua Hu, and Christopher C. Yang	
12:00 - 13:00	**Lunch**	

April 28, 2009		
	Room A	**Room B**
13:00 - 14:40	**Session 2A** **Semi-supervised Learning and SVM**	**Session 2B** **Clustering 1**
	Robust Graph Hyperparameter Learning for Graph Based Semi-Supervised Classification (Regular) Krikamol Muandet, Sanparith Marukatat, and Cholwich Nattee	Regularized Local Reconstruction for Clustering (Regular) Jun Sun, Zhiyong Shen, Bai Su, and Yi-Dong Shen
	Budget Semi-supervised Learning Zhi-Hua Zhou, Michael Ng, Qiao-Qiao She, and Yuan Jiang	Clustering with lower bound on Similarity (Regular) Mohammad Al Hasan, Saeed Salem, Benjarath Pupacdi, and Mohammed Zaki
	When does Co-Training Work in Real Data? Charles X. Ling, Jun Du, and Zhi-Hua Zhou	Approximate Spectral Clustering (Regular) Liang Wang, Christopher Leckie, Rao Kotagiri, and James Bezdek
	Classification of Audio Signals Using a Bhattacharyya Kernel-based Centroid Neural Network Dong-Chul Park, Yunsik Lee, and Dong-Min Woo	Pairwise Constrained Clustering for Sparse and High Dimensional Feature Spaces Su Yan, Hai Wang, Dongwon Lee, and C. Lee Giles
	Sparse Kernel Learning and the Relevance Units Machine Junbin Gao, and Jun Zhang	
14:40 - 15:00	**Coffee Break**	

April 28, 2009		
	Room C	**Room D**
13:00 - 14:40	**Session 2C** **Sequence Data Mining**	**Tutorial 2**
	A Polynomial-Delay Polynomial-Space Algorithm for Extracting Frequent Diamond Episodes from Event Sequences (Regular) Takashi Katoh, Hiroki Arimura, and Kouichi Hirata	**Mining Evolution of Complex Structured Data** by Sourav S Bhowmick
	Computing Substitution Matrices for Genomic Comparative Analysis Minh Duc Cao, Trevor Dix, and Lloyd Allison	
	Mining Both Positive and Negative Impact-Oriented Sequential Rules From Transactional Data: a Case Study in Social Security Yanchang Zhao, Huaifeng Zhang, Longbing Cao, Chengqi Zhang, and Hans Bohlscheid	
	Aggregated Subset Mining Albrecht Zimmermann, and Björn Bringmann	
	Hot Item Detection in Uncertain Data Matthias Renz, Andreas Zuefle, Hans-Peter Kriegel, and Thomas Bernecker	
14:40 - 15:00	**Coffee Break**	

April 28, 2009		
	Room A	**Room B**
15:00 - 17:00	**Session 3A Statistical Methods and Ensemble**	**Session 3B Rule Discovery**
	A Statistical Approach for Binary Vectors Modeling and Clustering (Regular) Nizar Bouguila, and Khalid Daoudi	Interval Data Classification under Partial Information: A Chance-Constraint Approach (Regular) Sahely Bhadra, Saketha Nath Jagarlapudi, Aharon Ben-Tal, and Chiranjib Bhattacharyya
	Multi-Resolution Boosting for Classification and Regression Chandan K Reddy, and Jin-Hyeong Park	Negative Encoding Length as a Subjective Interestingness Measure for Groups of Rules (Regular) Einoshin Suzuki
	Spanning Tree Based Attribute Clustering Yifeng Zeng, and Jorge Cordero H.	On optimal rules discovery: a framework and a necessary and sufficient condition for optimality Yannick Le Bras, Philippe Lenca, and Stéphane Lallich
	The effect of parameter tuning and focusing on bus travel time prediction João Moreira, Carlos Soares, Alipio Jorge, and Jorge Freire de Sousa	Discovering Action Rules that are Highly Achievable from Massive Data Einoshin Suzuki
	Transfer Learning Action Models by Measuring the Similarity of Different Domains Hankui Zhuo, and Qiang Yang	Extracting Fuzzy Rules for Detecting Ventricular Arrhythmias Based on NEWFM Dong-Kun Shin, Sang-Hong Lee, and Joon S. Lim

April 28, 2009		
	Room C	**Room D**
15:00 - 17:00	**Session 3C** **Pattern Mining**	**Tutorial 2 (Cont.)**
	The Studies of Mining Frequent Patterns Based on Frequent Pattern Tree (Regular) Show-Jane Yen, Yue-Shi Lee, Chiu-Kuang Wang, and Jung-Wei Wu	**Mining Evolution of Complex Structured Data** by Sourav S Bhowmick
	Discovering Periodic-Frequent Patterns in Transactional Databases (Regular) Syed Khairuzzaman Tanbeer, Chowdhury Ahmed, Byeong-Soo Jeong, and Young-Koo Lee	
	Trace Mining from Distributed Assembly Databases for Causal Analysis Shohei Hido, Hirofumi Matsuzawa, Fumihiko Kitayama, and Masayuki Numao	
	Let's Tango - Finding the Right Couple for Feature-Opinion Association in Sentiment Analysis Kam Tong Chan, and Irwin King	
	An Efficient Candidate Pruning Technique for High Utility Pattern Mining Chowdhury Farhan Ahmed, Syed Tanbeer, Byeong-Soo Jeong, and Young-Koo Lee	

April 29, 2009		
	Room A	**Room B**
8:30 - 10:00	**Session 4A Clustering 2**	**Session 4B Web Mining 1**
	An Integration of Fuzzy Association Rules and WordNetfor Document Clustering (Regular) Chun-Ling Chen, Frank S.C. Tseng, Tyne Liang, and Tyne Liang	Quantifying Asymmetric Semantic Relations from Query Logs by Resource Allocation (Regular) Zhiyuan Liu, Yabin Zheng, and Maosong Sun
	Nonlinear Data Analysis Using A New Hybrid Data Clustering Algorithm (Regular) Ureerat Wattanachon	Acquiring Semantic Relations using the Web as Background Knowledge (Regular) Wilson Wong, Wei Liu, and Mohammed Bennamoun
	Clustering Documents using a Wikipedia-based Concept Representation Anna Huang, David Milne, Eibe Frank, and Ian H. Witten	Grouped ECOC Conditional Random Fields for Prediction of Web User Behavior Yong Zhen Guo, Kotagiri Ramamohanarao, and Laurence A.F. Park
	An Instantiation of Hierarchical Distance-based Conceptual Clustering for Propositional Learning Maria Jose Ramirez-Quintana, Ana Funes, Jose Hernandez-Orallo, and Cesar Ferri	CLHQS: Hierarchical Query Suggestion by Mining Clickthrough Log Depin Chen, Jun Yan, Zhijun Yin, and Yan Xiong
10:00 - 10:20	**Coffee Break**	

April 29, 2009		
	Room C	**Room D**
8:30 - 10:00	**Session 4C** **Text Mining 2**	**Tutorial 3**
	Text Categorization using Fuzzy Proximal SVM and Distributional Clustering of words (Regular) Arunkumar Mani, and Madan Gopal	**Issues of Mining for Heterogeneous Social Networks** by Shou-De Lin, Hung-Yi Lo and Cheng-Te Li
	Cool Blog Classification from Positive and Unlabeled Examples (Regular) Kritsada Sriphaew, Hiroya Takamura, and Manabu Okumura	
	A Corpus-based Approach for Automatic Thai Unknown Word Recognition using Ensemble Learning Techniques Jakkrit TeCho, Cholwich Nattee, and Thanaruk Theeramunkong	
	Building a Text Classifier by a Keyword and Unlabeled Documents Qiu Qiang, Yang Zhang, and Junping Zhu	
10:00 - 10:20	**Coffee Break**	

April 29, 2009		
	Room A	**Room B**
10:20 - 12:00	**Session 5A** **Outlier Detection**	**Session 5B** **Statistical Methods**
	Detecting abnormal events via Hierarchical Dirichlet Processes (Regular) Xian-Xing Zhang, Hua Liu, Yang Gao, and Derek Hao Hu	Active Learning for Causal Bayesian Network Structure with Non-symmetrical Entropy (Regular) Guoliang Li, and Tze Yun Leong
	A New Local Distance-based Outlier Detection Approach for Scattered Real-World Data Ke Zhang, Marcus Hutter, and Huidong Jin	A Comparative Study of Bandwidth Choice in Kernel Density Estimation for Naive Bayesian Classification (Regular) Bin Liu, Geoff Webb, Ying Yang, and Janice Boughton
	Mining Outliers with Faster Cutoff Update and Space Utilization Chi Cheong Szeto, and Edward Hung	Analysis of Variational Bayesian Matrix Factorization (Regular) Shinichi Nakajima, and Masashi Sugiyama
	Outlier Detection in Axis-Parallel Subspaces of High Dimensional Data Hans-Peter Kriegel, Peer Kröger, Erich Schubert, and Arthur Zimek	An Effective Boosting Mehod for Naïve Bayesian Classifiers by Local Accuracy Estimation Zhipeng Xie
	k-Dominant Skyline Computation by using Sort-Filtering Method Md. Anisuzzaman Siddique and Yasuhiko Morimoto	
12:00 - 13:00	**Lunch**	

April 29, 2009		
	Room C	**Room D**
10:20 - 12:00	**Session 5C Recommendation and Rating Systems**	**Tutorial 3 (Cont.)**
	Long-Term Relevance Feedback for Content-Based Image Suggestion (Regular) Sabri Boutemedjet, and Djemel Ziou	**Issues of Mining for Heterogeneous Social Networks** by Shou-De Lin, Hung-Yi Lo and Cheng-Te Li
	COMUS: Ontological and Rule-based Reasoning for Music Recommendation System Seungmin Rho	
	Spatial Weighting for Bag-of-Visual-Words Representation and Its Application in Content-Based Image Retrieval Xin Chen, Xiaohua Hu, and Xiajiong Shen	
	Item Preference Parameters from Grouped Ranking Observations Hideitsu Hino, Yu Fujimoto, and Noboru Murata	
	Cross-Channel Query Recommendation on Commercial Mobile Search Engine: Why, How and Empirical Evaluation Shunkai Fu, Bingfeng Pi, Ying Zhou, Micheal Desmarais, Weilei Wang, Song Han, and Xunrong Rao	
12:00 - 13:00	**Lunch**	

April 29, 2009		
	Room A	**Room B**
13:00 - 14:00	**Keynote Speech: Finding Hidden Structures in Relational Databases Yu Xu, Jeffrey, PhD, The Chinese University of Hong Kong**	
14:00 - 15:40	**Session 6A Outlier Detection and Spatial Data Mining**	**Session 6B Ensemble Methods**
	Detecting Link Hijacking by Web Spammers (Regular) YOUNGJOO CHUNG, Masashi Toyoda, and Masaru Kitsuregawa	A Data Driven Ensemble Classifier for Credit Scoring Analysis (Regular) Nan-Chen Hsieh, Lun-Ping Hung, and Chia-Ling Ho
	Data Mining for Intrusion Detection: from Outliers to True Intrusions Florent MASSEGLIA, Goverdhan Singh, Celine Fiot, Alice Marascu, and Pascal Poncelet	A Multi-Partition Multi-Chunk Ensemble Technique to Classify Concept-Drifting Data Streams (Regular) Mohammad Mehedy Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham
	A Multi-Resolution Approach for Atypical Behaviour Mining Florent MASSEGLIA, and Alice Marascu	Parameter Estimation in Semi-Random Decision Tree Ensembling on Streaming Data (Regular) PeiPei Li, Qianhui Liang, Xindong Wu, and Xuejang Hu
	Change Analysis in Spatial Data by Combining Contouring Algorithms with Supervised Density Functions Chun Sheng Chen, Vadeerat Rinsurongkawong, Christoph Eick, and Michael Twa	Diversity in Combinations of Heterogeneous Classifiers Kuo-Wei Hsu, and Jaideep Srivastava
	Centroid Neural Network with Spatial Constraints Dong-Chul Park	
15:40 - 16:00	**Coffee Break**	

April 29, 2009		
13:00 - 14:00	**Keynote Speech: Finding Hidden Structures in Relational Databases** **Yu Xu, Jeffrey, PhD, The Chinese University of Hong Kong**	
	Room C	**Room D**
14:00 - 15:40	**Session 6C** **Link Analysis**	**Tutorial 4**
	Exploiting the Block Structure of Link Graph for Efficient Similarity Computation (Regular) Pei Li, Yuanzhe Cai, Hongyan Liu, Jun He, and Xiaoyong Du	**Outlier Detection Techniques** by Hans-Peter Kriegel, Peer Kröger, Arthur Zimek
	Growth Analysis of Neighbor Network for Evaluation of Damage Progress Ken-ichi Fukui, Kazuhisa Sato, Junichiro Mizusaki, Kazumi Saito, Masahiro Kimura, and Masayuki Numao	
	Link Structure Ranking Algorithm for Trading Networks Andri Mirzal	
	A Parallel Algorithm for Finding Related Pages in the Web by using Segmented Link Structures Shen Xiaoyan, Chen Junliang, Meng Xiangwu, Zhang Yujie, and Liu Chuanchag	
	Boosting Biomedical Information Retrieval Performance through Citation Graph: An Empirical Study Xiaoshi Yin, Xiangji Huang, Qinmin Hu, and Zhoujun Li	
15:40 - 16:00	**Coffee Break**	

April 29, 2009		
	Room A	**Room B**
16:00 - 18:00	**Session 7A Feature Selection and Construction**	**Session 7B Stream and Time-series Data Mining**
	Online Feature Selection Algorithm with Bayesian l1 Regularization (Regular) Yunpeng Cai, Yijun Sun, and Steve Goodison	Speeding up Similarity Search on Large Time Series Dataset Under Time Warping Distance Pongsakorn Ruengronghirunya, Vit Niennattrakul, and Chotirat Ann Ratanamahatana
	On Joint Feature Selection and Local Learning Based Clustering (Regular) Yiu-ming Cheung, and Hong Zeng	A Novel Fractal Representation for Dimensionality Reduction of Large Time Series Data Poat Sajjipanon, and Chotirat Ann Ratanamahatana
	Similarity-based Feature Selection for Learning From Examples with Continuous Values Yun Li, Sun-Jun Hu, Wen-Jie Yang, Guo-Zi Sun, Fang-Wu Yao, and Geng Yang	Clustering Data Streams in Optimization and Geography Domains Ling-Yin Wei, and Wen-Chih Peng
	Application-independent feature construction from noisy samples Dominique Gay, Nazha Selmaoui, and Jean-FranÃ§ois Boulicaut	CBDT: A Concept Based Approach to Data Stream Mining Stefan Hoeglinger, Russel Pears, and Yun Sing Koh
	Estimating Optimal Feature Subsets Using Mutual Information Feature Selector and Rough Sets Sombut Foitong, Pornthep Rojanavasu, Boonwat Attachoo, and Ouen Pinngern	Meaningful Subsequence Matching under Time Warping Distance for Data Stream Vit Niennattrakul, and Chotirat Ann Ratanamahatana
18:30 - 20:30	**Banquet**	

April 29, 2009		
	Room C	**Room D**
16:00 - 18:00	**Session 7C** **Support Vector Machines**	**Tutorial 4 (Cont.)**
	Ranking Vector Machine: An Efficient Method for Learning Ranking SVM (Regular) Hwanjo Yu, Youngdae Kim, and Seungwon Hwang	**Outlier Detection Techniques** by Hans-Peter Kriegel, Peer Kröger, Arthur Zimek
	A kernel framework for protein residue annotation (Regular) Huzefa Rangwala, Christopher Kauffman, and George Karypis	
	On Pairwise Kernels: An Efficient Alternative and Generalization Analysis Hisashi Kashima, Satoshi Oyama, Yoshihiro Yamanishi, and Koji Tsuda	
	A Family-based Evolutional Approach for Kernel Tree Selectionin SVMs Ithipan Methasate, and Thanaruk Theeramunkong	
	An Online Incremental Learning Vector Quantization Ye Xu, Furao Shen, Osamu Hasegawa, and Jinxi Zhao	
18:30 - 20:30	**Banquet**	

April 30, 2009		
	Room A	**Room B**
9:00 - 10:00	**Keynote Speech: The future of search: an online content perspective Andrew Tomkins, PhD, Yahoo! Research**	
10:00 - 10:20	**Coffee Break**	
10:20 - 12:00	**Session 8A Classification and Link Analysis**	**Session 8B Web Mining 2**
	Dynamic Exponential Family Matrix Factorization (Regular) Kohei Hayashi, Jun-ichiro Hirayama, and Shin Ishii	X-tracking the Changes of Web Navigation Patterns Long Wang, and Christoph Meinel
	A Nonparametric Bayesian Learning Model: Application to Text and Image Categorization (Regular) Nizar Bouguila, and Djemel Ziou	Website Classification using Extended Hidden Markov Models Majid Yazdani, Milad Eftekhar, and Hassan Abolhassani
	On Mining Rating Dependencies in Online Collaborative Rating Networks Hady W. Lauw, Ee-Peng Lim, and Ke Wang	Emotion Recognition of Pop Music Based on Maximum Entropy with Priors Hui He, Bo Chen, and Jun Guo
	Learning to Extract Relations for Relational Classification Steffen Rendle, Christine Preisach, and Lars Schmidt-Thieme	Simultaneously Finding Fundamental Articles and New Topics Using a Community Tracking Method Tieyun Qian, Jaideep Srivastava, Zhiyong Peng, and Phillip Sheu
		Towards a Novel Association Measure via Web Search Results Mining Xiaojun Wan
12:00 - 13:00	**Lunch**	
13:00 - 16:00	**Excursion**	

April 30, 2009		
9:00 - 10:00	**Keynote Speech: The future of search: an online content perspective Andrew Tomkins, PhD, Yahoo! Research**	
10:00 - 10:20	**Coffee Break**	
	Room C	**Room D**
10:20 - 12:00	**Session 8C Text Mining 3**	**PAKDD 2009 Data Mining Competition**
	Thai Word Segmentation with Hidden Markov Model and Decision Tree (Regular) Poramin Bheganan, Richi Nayak, and Yue Xu	
	An efficient method for generating, storing and matching features for text mining (Regular) Chan Shing Kit, and Wai Lam	
	A Discriminative Approach to Topic-based Citation Suggestion Jie Tang, and Jing Zhang	
	Romanization of Thai Proper Names Based On Popularity Of Usages Akegapon Tangverapong	
12:00 - 13:00	**Lunch**	
13:00 - 16:00	**Excursion**	

PAKDD Steering Committee

Chair David Cheung, University of Hong Kong, China
Co-Chair Rao Kotagiri, University of Melbourne, Australia
(Life long member)

Treasurer Graham Williams, ATO, Australia

Members

Arbee L. P. Chen, National Chengchi University, Taiwan, ROC
Ming-Syan Chen, National Taiwan University, Taiwan, ROC
Tu Bao Ho, Japan Advanced Institute of Science and Technology, Japan
Masaru Kitsuregawa, Tokyo University, Japan
Huan Liu, Arizona State University, U.S.
Ee-Peng Lim, Nanyang Technological University, Singapore
Hiroshi Motoda, AFOSR/AOARD, Japan (Life long member)
Jaideep Srivastava, University of Minnesota, U.S.A
Takao Terano, Tokyo Institute of Technology, Japan
Kyu-Young Whang, Korea Advanced Institute of Science & Technology, Korea
Chengqi Zhang, University of Technology Sydney, Australia
Ning Zhong, Maebashi Institute of Technology, Japan
Zhi-Hua Zhou, Nanjing University, China

PAKDD Distinguished Contribution Award Selection Committee
Chair Graham Williams, ATO, Australia

PAKDD Most Influential Paper Award Selection Committee
Chair Zhi-Hua Zhou, Nanjing University, China

Organization Committee

Honorary Chairs

David Cheung
University of Hong Kong, China

Hiroshi Motoda
Osaka University, Japan

Local Honorary Chairs

Pirom Kamolratanakul

Rector of Chulalonkorn University

Surapon Nitikraipot
Rector of Thammasat University

Said Irandoust
President of AIT

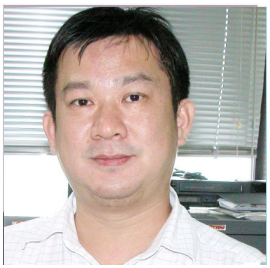
General Chairs (Conference Chairs)

Masaru Kitsuregawa Tokyo University, Japan

Vilas Wuwongset
Asian Institute of Technology, Thailand

Program Committee Chairs

Thanaruk Theeramunkong
SIIT, Thammasat University



Boonserm Kijsirikul Chulalongkorn University

Nick Cercone York University, Canada

Ho Tu Bao Japan Advanced Institute of Science & Technology

Workshop Chairs

Manabu Okumura Tokyo Institute of Technology, Japan

Bernhard Pfahringe University of Waikato, New Zealand

Tutorial Chairs

Vincent S. Tseng
National Cheng Kung University, Tainan, Taiwan

Shusaku Tsumoto
Shimane University, Japan

Journal Publication

Yasushi Sakurai
NTT, Japan

Nick Cercone
York University, Canada

Publication Chairs

Cholwich Nattee SIIT, Thammasat University, Thailand

Local Arrangement Committee

Chair

Chotirat Ratanamahatana Chulalongkorn University, Thailand

Members

Chutima Pisarn	Prince of Songkla University, Thailand
Dararat Srisai	Chulalongkorn University, Thailand
Ithipan Methasate	SIIT, Thammasat University, Thailand
Juniar Ganis	SIIT, Thammasat University, Thailand
Kritsada Sriphaew	Tokyo Institute of Technology, Japan
Kovit Punyasoponlert	Chulalongkorn University, Thailand
Nattapong Tongtep	SIIT, Thammasat University, Thailand
Nichnan Kittiphattanabawon	SIIT, Thammasat University, Thailand
Pakinee Aimmanee	SIIT, Thammasat University, Thailand
Pasakorn Tangchanachaianan	Chulalongkorn University, Thailand
Peerasak Intarapaiboon	SIIT, Thammasat University, Thailand
Piya Limcharoen	SIIT, Thammasat University, Thailand
Ratthachat Chatpatanasiri	Chulalongkorn University, Thailand
Sudchaya Saengthong	SIIT, Thammasat University, Thailand
Surapa Thiemjarus	SIIT, Thammasat University, Thailand
Swit Phuvipadawat	SIIT, Thammasat University, Thailand
Tanasanee Phienthrakul	Chulalongkorn University, Thailand
Thanasan Tanhermhong	SIIT, Thammasat University, Thailand
Thatsanee Charoenporn	NECTEC, Thailand
Thawatchai Suwannapong	SIIT, Thammasat University, Thailand
Vit Niennattrakul	Chulalongkorn University, Thailand
Warakorn Gulyanon	SIIT, Thammasat University, Thailand
Wirat Chinnan	SIIT, Thammasat University, Thailand

Organized by

Sirindhorn International Institute of Technology, Thammasat University
http://www.siit.tu.ac.th

Dept. of Computer Engineering, Chulalongkorn Univesrity
http://www.cp.eng.chula.ac.th/

School of Engineering and Technology, Asian Institute of Technology
http://www.cs.ait.ac.th/

Program Committee

Chairs and Co-Chairs

Thanaruk Theeramunkong	SIIT, Thammasat University
Boonserm Kijsirikul	Chulalongkorn University
Nick Cercone	York University, Canada
Ho Tu Bao	Japan Advanced Institute of Science & Technology

Members (Sorted in alphabetical order)

Haimonti Dutta	Columbia University
Ah-Hwee Tan	Nanyang Technological University
Aidong Zhang	State University of New York at Buffalo
Aijun An	York University
Aixin Sun	Nanyang Technological University
Ajith Abraham	Norwegian University of Science and Technology
Akihiro Inokuchi	Osaka University
Akira Shimazu	Japan Advanced Institute of Science and Technology
Aleksandar Lazarevic	United Technologies Research Center
Alfredo Cuzzocrea	University of Calabria
Alipio M. Jorge	University of Porto LIAAD, INESC Porto LA
Alok Choudhary	Northwestern University
Amanda Clare	Aberystwyth University
Ambuj K Singh	University of California at Santa Barbara
Annalisa Appice	Universita' di Bari
Anne M. Denton	North Dakota State University
Anthony Bagnall	University of East Anglia
Arbee L.P. Chen	National Chengchi University
Aris Anagnostopoulos	Yahoo! Inc.
Arthur Tay	National University of Singapore
Ashkan Sami	Shiraz University; Iran
Ashok Srivastava	NASA
Atsuyoshi Nakamura	Hokkaido University
Aurawan Imsombut	Dhurakij Pundit University

Baoning Wu	Lehigh University
Beatriz de la Iglesia de la Iglesia	University of East Anglia
Ben Kao	The University of Hong Kong
Benjamin C. M. Fung	Concordia University
Bernhard Pfahringer	University of Waikato
Bettina Berendt	Katholieke Universiteit Leuven
Bing Guo	Sichuan University
Boonserm Kijsirikul	Chulalongkorn University, Thailand
Bradley Malin	Vanderbilt University
Carlos Alberto Alejandro Castillo Ocaranza	Yahoo!
Chai Wutiwiwatchai	NECTEC
Chandan Reddy	Wayne State University
Chang-Tien Lu	Virginia Tech
Chaveevan Pechsiri	Dhurakijpundit university
Chengkai Li	University of Texas at Arlington
Chengqi Zhang	University of Technology Sydney
Chih-Jen Lin	National Taiwan University
Choochart Haruechaiyasak	National Electronics and Computer Technology Center (NECTEC)
Chotirat Ann Ratanamahatana	Chulalongkorn University
Christian Dawson	Loughborough University
Christophe Giraud-Carrier	Brigham Young University
Chun-hung Li	Hong Kong Baptist University
Chung-Hong Lee	National Kaohsiung University of Applied Sciences
Chunsheng Yang	NRC Institute for Information Technology
Chutima Pisarn	Prince of Songkla University
Claudio Lucchese	H.P.C. Lab. I.S.T.I.-C.N.R.
Clement Yu	University of Illinois at Chicago
Dacheng Tao	The Hong Kong Polytechnic University
Daisuke Ikeda	Kyushu University
Daniel C. Neagu	University of Bradford
Dao-Qing Dai	Sun Yat-Sen University
Daoqiang Zhang	Nanjing University of Aeronautics and Astronautics
David Taniar	Monash University
Daxin Jiang	Microsoft Research Asia
Dejing Dou	University of Oregon

Dell Zhang	University of London
Demetris Zeinalipour	Open University of Cyprus
Desheng Dash Wu	University of Toronto
Di Wu	Chinese University of Hong Kong
Diane Cook	Washington State University
Diansheng Guo	University of South Carolina
Dimitrios Katsaros	University of Thessaly
Dimitris Margaritis	Iowa State University
Dit-Yan Yeung	Hong Kong University of Science and Technology
Doina Caragea	Kansas State University
Domenico Talia	University of Calabria
Dou Shen	Microsoft adCenter Labs
Dragan Gamberger	Rudjer Boskovic Institute
Du Zhang	California State University
Eamonn Keogh	University of California
Ee-Peng Lim	Singapore Management University
Eibe Frank	University of Waikato
Evaggelia Pitoura	University of Ioannina
Evimaria Terzi	IBM Almaden
Fabian Moerchen	Siemens Corporate Research, Integrated Data Systems
Fabio Roli	University of Cagliari
Fabrizio Silvestri	ISTI-CNR
Feifei Li	Florida State University
Fernando Berzal	University of Granada
Francesco Masulli	University of Genova
Francesco Bonchi	Yahoo! Research
Gabriel Fung	The University of Queensland
Gagan Agrawal	Ohio State University
Gang Li	Deakin University
Gao Cong	Aalborg University
Gemma Garriga	Helsinki University of Technology
George Karypis	University of Minnesota
Georges Grinstein	University of Massachusetts
Giovanni Semeraro	University of Bari
Giuseppe Manco	National Research Council of Italy
Graham Williams	Australian Taxation Office
Grigorios Tsoumakas	Aristotle University of Thessaloniki

Guido Cervone	George Mason University
Guozhu Dong	Wright State University
Hai Wang	University of Southampton
Hasan Jamil	Wayne State University
Hideo Bannai	Kyushu University
Hiroki Arimura	Hokkaido University, Japan
Hiroyuki Kitagawa	University of Tsukuba
Hiroyuki Kawano	Nanzan University
Hisashi Kashima	IBM Research, Tokyo Research Laboratory
Hisham Al-Mubaid	University of Houston-Clear Lake
Hong Gao	Harbin Institute of technology
Howard Ho	IBM Almaden Research Center
Hsin-Chang Yang	National University of Kaohsiung
Hsin-Vonn Seow	University of Nottingham - Malaysia Campus
Hua Lu	Aalborg University
Hui Yang	San Francisco State University
Hui Xiong	Rutgers University
Hui Wang	University of Ulster
Huidong Jin	CSIRO, Australia
Huiyu Zhou	Brunel University
Hung Son Nguyen	Warsaw University
Ira Assent	Aalborg University
Ivor W. Tsang	Nanyang Technological University, Singapore
Jaakko Hollmen	Helsinki University of Technology
Jake Chen	Indiana University-Purdue University Indianapolis
Jan Ramon	Katholieke Universiteit Leuven
Jan Rauch	University of Economics
Jason T. L. Wang	New Jersey Science and Technology University
Jean-Gabriel Gustave Ganascia	LIP6 - University Paris
Jean-Marc Petit	INSA Lyon
Jeremy Besson	Institute of mathematics and informatics
Jialie Shen	Singapore Management University
Jian Yin	Sun Yat-Sen University
Jianyong Wang	Tsinghua University
Jieping Ye	Arizona State University
Jieping Ye	Arizona State University
Jimmy Huang	York University

Jin Tian	Iowa State University
Jing Peng	Montclair State University
JingTao Yao	University of Regina
Jinyan Li	Nanyang Technological University
Jiong Yang	Case Western Reserve University
JoÃƒÂ£o P. Gama	Universidade do Porto
Joern Schneidewind	Telefonica o2 Business Intelligence Center
Johannes FÃƒÂ¼rnkranz	TU Darmstadt
John Keane	University of Manchester
Josep Domingo-Ferrer	Universitat Rovira i Virgili
Juan Miguel Campanario	Universidad de Alcala.
Juggapong Natwichai	Chiang Mai University
Junbin Gao	Charles Sturt University
Jure Leskovec	Cornell University
K. Selcuk Candan	Arizona State University
Kaidi Zhao	Amazon.com Inc
Kaiqi Huang	Chinese Academy of Sciences
Kanishka Bhaduri	NASA Ames Research Center
Kay Chen Tan	National University of Singapore
Keith C.C. CHAN	The Hong Kong Polytechnic University
Kevin Curran	University of Ulster
Kitsana Waiyamai	Kasetsart University
Konstantinos Kalpakis	UMBC
Kun Liu	IBM Almaden Research Center
Latifur Rahman Khan	University of Texas at Dallas
Limsoon Wong	National University of Singapore
Lipo Wang	Nanyang Technological University
Lisa Hellerstein	Polytechnic Institute of NYU
Longbing Cao	University of Technology Sydney
Luis Torgo	LIAAD/INESC Porto LA, University of Porto
Manabu Okumura	Tokyo Institute of Technology
Marco Maggini	University of Siena
Marut Buranarach	National Electronics and Computer Technology Center (NECTEC)
Masashi Shimbo	Nara Institute of Science and Technology
Masoud Jamei	Simcyp Ltd
Maybin Muyeba	Manchester Metropolitan University
Mehmet Koyuturk	Case Western Reserve University

Michael Schmidt	Albert-Ludwigs-Universitaet Freiburg
Michelangelo Ceci	University of Bari
Min Yao	Zhejiang University
Ming Hua	Simon Fraser University
Mingli Song	Zhejiang University
Mithun Prasad	University of California, Los Angeles
Mitsunori Ogihara Ogihara	University of Miami
Mohamed F Mokbel	University of Minnesota
Mohamed Medhat Gaber	Monash University
Myra Spiliopoulou	Otto-von-Guericke-University Magdeburg
N.Ch Sriman Narayana Iyengar	VIT University,Tamilnadu ,India
Ngoc Thanh Nguyen	Wroclaw University of Technology
Nick Cercone	York University
Nikunj Chandrakant Oza	NASA Ames Research Center
Ning Zhong	Maebashi Institute of Technology
Ninghui Li	Purdue University
Nucharee Premchaiswadi	Dhurakij Pundit University
Orlando De Jesus	Halliburton - Carrollton Technology Center
Osman Abul	TOBB University
P.K. Mahanti	University of New Brunswick
Panagiotis Karras	National University of Singapore
Pang-Ning Tan	Michigan State University
Patricia Riddle	University of Auckland
Paulo Cortez	University of Minho
Petra Kralj Novak	Jozef Stefan Institute
Petros Drineas	Rensselaer Polytechnic Institute
Philippe Lenca	TELECOM Bretagne
Punpiti Piamsa-nga	
Qingxiang Wu	Ulster University
Radha Krishna Murthy Karuturi	Genome Institute of Singapore
Raj Krishna Bhatnagar	University of Cincinnati
Rajendra Akerkar	Norwegian University of Science & Technology
Rajesh Reghunadhan	Bharathiar University
Ratthachat Chatpatanasiri	Chulalongkorn University
Reda Alhajj	University of Calgary
Richi Nayak	Queensland University of Technology

Ronald Rousseau	President of the ISSI
Rosa Meo	University of Torino
Rui Camacho	LIAAD/FEUP Universidade do Porto
Ruoming Jin	Kent State University
Salvatore Orlando	University of Venice
San-Yih Hwang	National Sun Yat-Sen University
Sanjay Ranka	University of Florida
Sanjay Chawla	University of Sydney
Sanparith Marukatat	NECTEC
Satoshi Oyama	Kyoto University
SEIJI YAMADA	National Institute of Informatics
Shen-Shyang Ho	Jet Propulsion Laboratory
Sheng Zhong	State University of New York at Buffalo
Shenghuo Zhu	NEC Laboratories America, Inc.
Shichao Zhang	Guangxi Normal University
Shichao Zhang	University of Technology Sydney
Shu-Ching Chen	Florida International University
Shun Ishizaki	Keio University
Silvia Chiusano	Politecnico di Torino
Spiros Papadimitriou	IBM TJ Watson
Srikanta Tirthapura	Iowa State University
Srinivasan Jagannathan	Kelly Technology Group
Stefan Rueping	Fraunhofer IAIS
Suman Nath	Microsoft Research
Sung Ho Ha	Kyungpook National University
Surapa Thiemjarus	SIIT
Szymon Jaroszewicz	National Institute of Telecommunications
Tadashi Nomoto	National Institute of Japanese Literature
Takeaki Uno	National Institute of Informatics
Takehisa Yairi	University of Tokyo
Takenobu Tokunaga	Tokyo Institute of Technology
Tamas Sarlos	Yahoo! Research
Tamer Kahveci	Univ. of Florida
Taneli MielikÃƒÂ¤inen	Nokia Research Center
Tansel Ozyer	TOBB University
Tanya Y Berger-Wolf	University of Illinois at Chicago
Tao Li	Florida International University
Tao Mei	Microsoft Research Asia

Tetsuya Yoshida	Hokkaido University
Thanaruk Theeramunkong	Thammasat University
Themis Palpanas	University of Trento
Thepchai Supnithi	National Electronics and Computer Technology Center
Tianhao Zhang	University of Pennsylvania
Tie-Yan Liu	Microsoft Research Asia
Tim Oates	University of Maryland Baltimore County
Tina Eliassi-Rad	Lawrence Livermore National Laboratory
Tom Croonenborghs	KHKempen University College
Tomoyuki Uchida	Hiroshima City University
Torsten Suel	Yahoo! Research
Toshihiro Kamishima	National Institution of Advanced Industrial Science and Technology (AIST)
Toshiro Minami	Kyushu Institute of Information Sciences (KIIS) and Kyushu University Library
Traian Marius Truta	Northern Kentucky University
Tru Cao	Ho Chi Minh City University of Technology
Tsuyoshi Murata	Tokyo Institute of Technology
Tu Bao Ho	Institute of Science & Technology
Ulf Brefeld	Technical University Berlin
Vagelis Hristidis	Florida International University
Vasant Honavar	Iowa State University
Vasilis George Aggelis	PIRAEUS Bank S.A.
Vasilis Megalooikonomou	Temple University
Vassilis Athitsos	University of Texas at Arlington
Vincent C S Lee	Monash University
Vincent S. Tseng	
Vincenzo Piuri	University of Milan
Virach Sortlertlamvanich	NECTEC
Wagner Meira Jr.	Universidade Federal de Minas Gerais
Wai Lam	The Chinese University of Hong Kong
Wei Fan	IBM T.J. Watson Research Center
Wen-Chih Peng	National Chiao Tung University
Wenliang Du	Syracuse University
Wilfred Ng	Hong Kong University of Science and Technology
William K. Cheung	Hong Kong Baptist University
Wlodek Zadrozny	IBM Research

Wolfgang Lehner	Technische Universitaet Dresden
Woong-Kee Loh	Sungkyul University
Wray Buntine	NICTA
Wynne Hsu	National University of Singapore
Xiangjun Dong	Shandong Institute of Light Industry
Xiao-Lin Li	Nanjing University
Xiaofeng Meng	Renmin University of China
Xiaohua Hu	Drexel University
Xiaohui Liu	Brunel University
Xiaolei Li	Microsoft
Xiaoli Li LI	Yanshan University China
Xiaowei Shao	University of Tokyo
Xindong Wu	University of Vermont
Xindong Wu	University of Vermont
Xingquan Zhu	Florida Atlantic University
Xintao Wu	University of North Carolina at Charlotte
Xue Li	The University of Queensland
Xuelong Li	University of London
Yan Zhou	University of South Alabama
Yang Xiang	Faculty of Business and Informatics CQUniversity
Yang ZHANG	Northwest A&F University
Yang-Sae Moon	Kangwon National University
Yanwei Pang	Tianjin University
Yasuhiko Morimoto	Hiroshima University
Yi Feng	Zhejiang University
Yi-Dong Shen	Chinese Academy of Sciences, China
Yi-Ping Phoebe Chen	Deakin University
Yifeng Zeng	Aalborg University
Yihua Wu	Google Inc.
Ying Tan	Peking University
Yiyu Yao	University of Regina
Yong Guan	Iowa State University
Yu Jian	Beijing Jiaotong University
Yuan Yuan	Aston University
Yuehui Chen	University of Jinan
Yun Fu	University of Illinois At Urbana-Champaign
Yutaka Matsuo	University of Tokyo
Zhanhuai Li	Northwest Polytechnical University

Zhaohui Tang	Microsoft adCenter Labs
Zhaoyang Dong	The University of Queensland
Zheng Chen	Microsoft Research Asia
Zhi-Hua Zhou	Nanjing University
Zhongfei (Mark) Zhang	SUNY Binghamton
Zhuoming Xu	Hohai University

PAKDD 2009 External Reviewers

Daan He
Ioannis Katakis
Jiye Li
Ratthachat Chatpatanasiri
Xiangdong An

Conference Guide

Registration Desk:

The registration desk can be found at the 2nd floor of the conference hotel, during the following periods:

Date	Open - Close
April 26	17:00 - 19:00
April 27	8:00 - 17:00
April 28	8:00 - 17:00
April 29	8:30 - 14:00
April 30	8:30 - 14:00

Presentation:

Regular paper presentations are indicated in the program by (Regular). Each regular paper presentation is allocated with 25 minutes, with 20 minutes for presentation and 5 minutes for questions; and each short paper presentation is allocated with 18 minutes, with 15 minutes for presentation and 3 minutes for questions. Please be at the presentation room 10 minutes before the session and contact your session chair. A staff will help you to connect your laptop with the LCD projector. To recognize session chairs, find the sign attached to the name badge.

Reception and Banquet:

Welcome reception starts at 19.00 on April 27, at the Sakura room, 37th floor. The banquet will be at the Bangkok Panorama 1, the 1st floor of the hotel.

Lunch places and meal coupons:

All registrants get meal coupons at the time of registration. The coupons can be used not only on the date their shown. The coupons are not redeemable.

Excursion:

Buses for the excursion to ancient city leave the conference hotel at 13.00 on April 30.

- Memo -

PAKDD 2009

The 13th Pacific-Asia Conference on
Knowledge Discovery and Data Mining

April 27-30, 2009
Imperial Queen's Park Hotel, Bangkok, Thailand

Organized by

AIT

Sponsored by

ECTI Association

NECTEC

THAILAND

PAKDD 2009

The 13th Pacific-Asia Conference on
Knowledge Discovery and Data Mining

April 27-30, 2009
Imperial Queen's Park Hotel, Bangkok, Thailand