

### 2<sup>nd</sup> International Workshop

on

# Intelligent Data Analysis and Management

# May 17, Friday, 2013 National University of Kaohsiung, Taiwan



## 2<sup>nd</sup> International Workshop on Intelligent Data Analysis and Management

#### May 17, Friday, 2013

#### National University of Kaohsiung, Taiwan

Time	Agenda	Location
09:00-09:30	Registration	COM M01-111
09:30-09:40	Opening Ceremony	COM M01-111
	Vice President, National University of Kaohsiung	
09:40-10:40	Invited Speech (1)	COM M01-111
	Speaker: Prof. Ee-Peng Lim	
	Topic: Social Analytics Research: Challenges and	
	Opportunities for Computer Science Researchers	
	Director, Living Analytics Research Center, Singapore	
	Management University	
10:40-11:00	Coffee Break	СОМ
11:00-12:00	Invited Speech (2)	COM M01-111
	Speaker: Prof. I-Hsien Ting	
	Topic: Identifying Key Users From Social Networks	
	Data	
	Department of Information Management	
	National University of Kaohsiung, Taiwan	
12:00-13:30	Lunch	
13:30-14:30	Invited Speech (3)	COM M01-111
	Speaker: Prof. Shou-De Lin	
	Topic: Big Data: the challenges and competitions	
	Department of Computer Science and Information	
	Engineering	
	National Taiwan University, Taiwan	
14:30-14:50	Coffee Break	СОМ
14:50-16:00	Panel Discussion (4)	COM M01-111
	Theme: Big Data and Social Network Innovation	
	Moderator: Prof. Leon Shyue-Liang Wang	
	Department of Information Management	
	National University of Kaohsiung, Taiwan	



### Social Analytics Research: Challenges and Opportunities for Computer Science Researchers

Ee-Peng Lim

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#### **Abstract**

Social analytics refers the use of data and decision analytics techniques to gain insights about individuals, communities and population at large. To support social analytics research, we need new theories, models, algorithms and systems creating unprecedented challenges and opportunities for computer science researchers. In this talk, we will give an overview of our social analytics research on Twitter data, a popular microblogging site. Our research covers projects ranging from realtime stream data processing, realtime content search, event detection, link mining, behavior mining, and sentiment analysis. We will also feature our ongoing system research that aims to support user-friendly realtime social analytics using publicly available data. With an integrated data, algorithm and system approach, we hope to pursue a new set of research problems that involve meaningful collaboration between researchers from computer science and other academic disciplines.

#### Short Biography

Ee-Peng Lim is a professor at the School of Information Systems of Singapore Management University (SMU). He received Ph.D. from the University of Minnesota, Minneapolis in 1994 and B.Sc. in Computer Science from National University of Singapore. His research interests include social network and web mining, information integration, and digital libraries. He is a Co-Director of the Living Analytics Research Center at SMU. He is currently an Associate Editor of the ACM Transactions on Information Systems (TOIS), Information Processing and Management (IPM), Social Network Analysis and Mining, Journal of Web Engineering (JWE), IEEE Intelligent Systems, International Journal of Digital Libraries (IJDL) and International Journal of Data Warehousing and Mining (IJDWM). He was a member of the ACM Publications Board until December 2012. He serves on the Steering Committee of the International Conference on Asian Digital Libraries (ICADL), Pacific Asia Conference on Knowledge Discovery and Data Mining (PAKDD), and International Conference on Social Informatics (SocInfo).

#### Big Data: the challenges and competitions



Shou-De Lin

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#### **Abstract**

In this talk, I'll introduce some challenges and opportunity for big data, and share some of the experience in analyzing them. In particular, I'll share some of the experiences we have learned from participating ACM KDDCup for the past several years. Instead of theoretical machine learning techniques, this talk will be focused more on the practical issues and tricks that are important to train an effective and efficient classifier, based on several case studies about medical data mining, telcom user behavior mining, educational data mining, and music recommendation.

#### Short Biography

Shou-de Lin is currently an associate professor in the CSIE department of National Taiwan University. He holds a BS in EE department 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. He joined National Taiwan University in 2007. He leads the Machine Discovery and Social Network Mining Lab in NTU. Before joining NTU, he was a post-doctoral research fellow at the Los Alamos National Lab. Prof. Lin's research includes the areas of knowledge discovery and data mining, social network analysis, natural language processing and machine learning. His international recognition includes the best paper award in IEEE Web Intelligent conference 2003, Google Research Award in 2007, Microsoft research award in 2008, merit paper award in TAAI 2010, and best paper award in ASONAM 2011. He is the all-time winners in ACM KDD Cup, leading or co-leading the NTU team to win championships in 2008 (co-champion with IBM Research), 2010 (student team champion and overall team champion), 2011 (dual champions in both tracks), and 2012 (Champion in track 2), ranked 2nd in 2003 and 3rd in 2009. He is currently the associate editor for International Journal on Social Network Mining and was the secretary general for Taiwanese Association for Artificial Intelligence.

#### **Identifying Key Users from Social Networks Data**

I-Hsien Ting
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#### **Abstract**

In recent years, social networks have becoming a very popular topic in the area of information technology. Large amount of social data have been generated due to the rapid development of web 2.0 and social networking website. In order to apply the social data, social networks analysis is now a very important methodology to analyze social data, especially to identify key users. The identification of key users is essential for many applications, because it can help to get useful information or to transfer information in social networks more efficient. In this talk, I will share the research results of identifying key users from two different types of social networking website, which are Microblogs (Plurk.com) and Virtual Community (IMDb). The approaches about how to identify key users from the two social networking websites will be introduced as well as the evaluation of the quality of the identified key users. In addition, potential applications about key users in Business will also be discussed as the conclusion of this talk.

#### Short Biography

I-Hsien Ting received his Ph.D. from Department of Computer Science, The University of York, United Kingdom in 2007. From 2007, he join the Department of Information Management of National University of Kaohsiung in Taiwan as an assistant professor. His research interests including Data Mining, Web Mining, Social Networks Analysis and Mining, AI for Games, etc. He has published more than 50 papers related to the research areas. He is also very active and organized many International conferences and plays the role of program committee in more than 50 International conferences. Currently, he is the associate editor in many International Journals, such as Journal of Social Networks Analysis and Mining, Online Information Review, etc. as well as he is referrer of many top tier International Journals.