## **Emotion Detection and its Applications**

Speaker: Dr. Lun-Wei Ku Date: April 23, 2014

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## Abstract

Emotion analysis is included in the research domain of sentiment analysis. It has attracted much attention and become more and more important for several reasons. As emotion is a subjective state of people, it is a good reference to know user preferences and further to provide suitable recommendations; Emotion reflects people's feelings, so it is very helpful in the design of human-computer interface; Emotional expressions have powerful influence on readers, and therefore extracting them are critical for reputation management of people, companies, brands and products; Emotions are related to both mental and physical health. Hence psychologists and medical groups have also joined this research domain.

The talk will begin from some prior knowledge of emotion detection, such as how emotions are categorized, available corpora and the characteristics of this research problem. An overview of some novel approaches for detecting emotions comes next, and then the challenges to detecting emotions will be discussed. Finally, several interesting applications of emotion detection will show the value of related techniques and conclude this talk.

## **BIOGRAPHY**



Lun-Wei Ku received her B.S. M.S., and Ph.D. degree in Computer Science and Information Engineering from National Taiwan University, Taipei, Taiwan, in 1998, 2000, and 2009 respectively. Then she joined the Department of Computer Science and Information Engineering, National Yunlin University of Science and Technology (Yuntech), Taiwan, as an assistant professor in 2011. Since Aug. 2012, she joined the Institute of Information Science, Academia Sinica as an assistant research fellow. Previously, she was a postdoctoral researcher at the Department of Computer Science and Information Engineering, National Taiwan University, Taipei, Taiwan, between Aug. 2009 and Jul. 2010, working on

the project "Machine learning methods for ranking problems in multilingual information retrieval". Her research interests include natural language processing, sentiment analysis, information retrieval, and computational linguistics. She has been working on Chinese sentiment analysis since year 2005 and was the co-organizer of NTCIR MOAT Task (Multilingual Opinion Analysis Task, traditional Chinese side) from year 2006 to 2010. Moreover, since 2013, she has been the organizer of the new workshop in this research domain: Workshop on Natural Language Processing for Social Media (SocialNLP). Below are the other professional international activities she involved: Organizer, AFNLP SIG SocialNLP, Publication Co-Chair, The 6th International Joint Conference on Natural Language Processing (IJCNLP 2013), Nagoya, Japan (2013/10); Publicity Chair, The Twenty-fourth Conference on Computational Linguistics and Speech Processing (Rocling 2012), Taiwan (2012/09); Secretary, International Conference on Information Security and Intelligence Control (ISIC 2012), Taiwan (2012/08); Finance Chair, The Sixth Asia Information Retrieval Societies Conference (AIRS 2010), Taiwan (2010/12); Session Chair, The 21nd Conference on Computational Linguistics and Speech Processing (ROCLING 2009), Taiwan (2009/09).