The Asia-Pacific Signal and Information Processing Association (APSIPA) Distinguished Lecture

Speaker: Chung-Hsien Wu, National Cheng Kung University

Title: Interaction Style Recognition in Spoken Conversation Based on Psychological Factors
Time: 9:30-10:30 am, 22 Sep 2014
Venue: Guo5 Hall of the International Conference Center of Northwestern Polytechnical University, Xi'an

Host: Prof. Fu Zhonghua

Abstract — In today's world, human-computer interface plays a key role in daily life. Numerous researchers are committed to creating a dialogue system that can improve the ability of the computer to understand human intentions and thus respond appropriately. Understanding the latent meaning of social signals is indispensable for the day-to-day functioning of a human being. Therefore, automatically deciding how a speaker is engaged in a conversation is crucial for enabling harmonious interaction between computers and humans. An aspect of understanding and modeling human intentions that has predominantly been the focus of psychology research is increasingly attracting attention within the engineering community: determining what information a person conveys and how the person interacts with others. In this talk, I will present theoretical and practical work offering new and broad views of the latest research in interaction style detection from speech and facial expression. I will discuss a fusion approach developed based on psychological factors to recognize Interaction Style (*IS*) in spoken conversation. Especially, I will introduce a unified probabilistic framework to model the relationships among the psychological factors of emotion, personality trait (*PT*), transient *IS* and *IS* history, for recognizing *IS*.