

Interactive Visual Analysis of Human Emotions from Text

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ABSTRACT

People's write-ups, such as online reviews and personal micro-blogs, often reflect their emotions, ranging from just-in-the-moment sentiment to long-lasting mood. In this talk, I will first give an overview on modeling human emotions encapsulated in people's write-ups. I will then sample two visual analytic systems that use very different methods to automatically extract and visualize human emotions from text for two very different purposes. The first is an interactive visual analytic system that automatically summarizes human sentiment captured in online reviews and leverages the power of a crowd to rectify the imperfections in machine sentiment analysis. The second is a timeline-based visual analytic tool that extracts and visualizes a person's moods over time based on the person's tweets. Finally, I will discuss the challenges of inferring human emotional DNA from text in general and potential research directions.

Biography: Dr. Michelle Zhou is the Co-Founder and CEO of Juji, Inc., a high-tech startup that develops the next-generation of interactive intelligent systems that can deeply understand users and guide their behavior based on their psychological characteristics. Prior to starting Juji, Michelle led the User Systems and Experience Research (USER)



group at IBM Research – Almaden and then the IBM Watson Group. Michelle's expertise is in the interdisciplinary areas of intelligent user interaction (IUI), information visualization, and visual analytics. She has published over 80 peer-reviewed, refereed articles and filed about 40 patents in above areas. Michelle has also served on multiple journal editorial boards and numerous technical committees and is currently the Editor-in-Chief of ACM Transactions on Interactive Intelligent Systems. She received a Ph.D. in Computer Science from Columbia University in 1999 and was named an ACM Distinguished Scientist in 2009.