

Swiss Center for Affective Sciences

NCCR - CISA SEMINARS

Wednesday,
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2014

17:00 - 18:30

CISA Conference Room

Campus Biotech
9, chemin des Mines
Geneva

The digital traces of individual and collective
emotions

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The online interaction of millions of people leaves digital traces of their textual expression, creating large datasets in which emotions can be quantified through natural language processing, or “sentiment analysis”. I will present my work using online data on two research questions: The role of emotions in word usage and the dynamics of online emotional interaction. Concerning the first topic, we tested biases in the online emotional expression of English, German, and Spanish, finding that positive words are more frequent and negative words carry more information. As for the second topic, we analyzed delayed interaction in forums and real-time interaction in chatrooms. Our forum analysis identified stages of collective emotions and found that emotional expression precedes user disengagement. Our chatroom analysis identified large fluctuations towards positive and negative emotions that cannot be explained by individual emotion dynamics, calling for new techniques to explain collective emotions. To shed light on this question, we designed an agent-based model that reproduces online collective emotions, and allows us to formulate hypotheses on the dynamics of emotional interaction in online communities ■



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