EMOTION ANALYSIS IN NATURAL LANGUAGE

Pearl Pu

EPFL Lausanne, Switzerland

What is human emotion? It turns out there are more than 90 definitions. Among the most recent well-accepted ones, emotion is understood as our reaction to external and internal events such as a loud noise (external, surprise), being told we passed the college entrance exam (external, joy), or a thought that triggered the memory of a bygone love (internal, sad). We care about emotions because they motivate us to take actions, influence the quality of our decisions, and enhance our ability to empathize and communicate.

In this talk, I will describe the various challenges related to understanding, detecting, and visualizing emotions in large text datasets. To show you the research methodology we have explored and developed, I will demonstrate concrete steps and systems for eliciting emotion annotations from crowd workers, motivating and incentivizing them, building domain-specific lexicons, processing modifiers such as negations and intensifiers, and detecting emotions in human dialogs such as those found in TV series and movies.

The talk will end with some suggestions for future work in this area including building emotion-aware dialog systems.