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Title:

Detecting Uncertainty in Spoken Dialogue

Abstract:

Sometimes, it’s not *what* you say, but *how* you say it: in everyday communication, the acoustic features of natural speech convey a layer of meaning beyond the semantic content of the words that are spoken. My research group works on developing new speech technologies that augment traditional speech recognition by analyzing the acoustics and intonation of spoken natural language. In this talk I will discuss the problem of automatically recognizing speaker affect, highlighting models for inferring a person's *level of certainty*. We have collected and annotated a corpus of affective "uncertain" speech; it is available for use by the research community. I will describe our novel method for eliciting and labeling uncertain speech, the results of our uncertainty classification experiments, and challenges for robust affect recognition. Detecting uncertainty has broad applications in human-computer dialogue systems. We are also applying this work to the design of intelligent listening tools for promoting collaboration in human-human dialogue.