

HCSNet Plenary Speaker:
Spoken Dialogue Models for Virtual Humans

David Traum
Institute for Creative Technologies, Marina del Rey
University of Southern California, USA
traum@ict.usc.edu

Abstract

In this talk, I will survey several different kinds of dialogue models in use at the University of Southern California's Institute for Creative Technologies. These models differ in complexity, robustness, ease of authoring, and thus suitability for different kinds of projects, ranging from research prototypes to systems in use for training applications or as presentation tools accessible to the general public. The models include a text-classification approach in which answers are selected from an authored set, and no semantic reasoning is performed. "traditional" form-filling dialogue, a merging of the previous two approaches along with finite state networks for local dialogue structure, and a more advanced information-state model that is closely linked with AI planners and emotion reasoners.