

Virtual Humans: An Emerging Reality

Ron Cole
Center for Spoken Language Research
Institute for Cognitive Science
University of Colorado Boulder

This talk will discuss the vision and emerging reality of a new generation of human computer interfaces that use lifelike computer characters to interact with people much like people interact with each other. By combining knowledge about the social dynamics of face to face communication with leading-edge technologies in computer vision, spoken dialogue systems and character animation, it is now possible to create applications in which computer characters can behave like effective and sensitive teachers or therapists. This talk will demonstrate a virtual literacy tutor that is being used in classrooms to teach children to read and learn from text, and a virtual therapist designed to conduct speech therapy sessions with individuals with Parkinson disease. These virtual humans use technologies developed at the Center for Spoken Language Research at CU.

(Work supported by grants from the National Science Foundation, the National Institutes of Health and the Coleman Institute for Cognitive Disabilities.)