Engaging in a Multimodal Dialogue with Embodied Conversational Agents along the Virtuality Continuum (invited presentation)

Elisabeth André Multimedia Concepts and Applications University of Augsburg, Germany andre@informatik.uni-augsburg.de

In my talk, I will present a new generation of synthetic characters that are no longer bound to a flat screen, but able to enter a physical world and to engage in a conversation with a human user. Users and characters do no longer inhabit separated spaces, but share an informational and physical reality that is augmented by digital objects. As a consequence, communication has to take into account both the physical and the digital context. The talk will analyse new forms of deixis that are enabled by so-called directing-to and placing-for behaviours and may involve conversational locomotion. Directing-to behaviours rely on a number of verbal and non-verbal means including demonstrative pronouns, eye gaze or pointing gestures to signal the addressee what they are talking about. In my talk, I will show how to emulate such behaviours using an embodied conversational agent. Placing-for behaviours differ from directing-to behaviours by moving objects in the addressee's focus of attention. In my talk, I will present various tangible interfaces developed by our lab to enable placing-for behaviours in the physical space.