

The Union College Distinguished Science and Engineering Lecture Series presents:

**SOCIAL PRACTICE: SOCIOCULTURAL APPROACHES TO IDENTITY
AND CULTURE IN EMBODIED CONVERSATIONAL AGENTS**

DR. JUSTINE CASSELL

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- **Friday, February 11, 2011, Union College**
- **4:15 PM, Nott Memorial**
- Sponsors: Skidmore-Union ADVANCE Network Project, Union College Department of Computer Science

Abstract: In this talk I present a new approach to the design, development and evaluation of embodied conversational agents (ECAs) that allows them to index identity through culturally and socially authentic verbal and non-verbal behaviors. This approach is illustrated with research I am carrying out with children who speak several dialects of American English, and the subsequent implementation and iterative evaluations of a virtual peer based on that research. Results suggest that issues of identity in ECAs are more complicated than previous approaches might suggest, and that ECAs themselves may play a role in understanding issues of identity and language use in ways that have promise for educational applications.

About the speaker: Justine Cassell joined Carnegie Mellon University in August as director of the Human-Computer Interaction Institute in the School of Computer Science. A member of the faculty at Northwestern University from 2003 to 2010, she was the founding director of its Center for Technology and Social Behavior, and before that was a tenured professor in the MIT Media Lab.

A graduate of France's Université de Besançon and Dartmouth College, Cassell earned a master's degree in linguistics from the University of Edinburgh and a dual doctorate in linguistics and psychology from the University of Chicago. Her research interests originated in the study of human-human conversation and storytelling. Interested in allowing computational systems to participate in these activities, she deconstructed the linguistic and nonverbal elements of conversation and storytelling in such a way as to embody machines with conversational, social and narrative intelligence. She is credited with developing the Embodied Conversational Agent — a virtual human capable of interacting with people using both verbal and non-verbal behavior. Her research has come to address the impact and benefits of technologies such as these on learning and communication. Cassell held the AT&T Research Chair at Northwestern beginning in 2006 and was honored in 2008 with the "Women of Vision" award from the Anita Borg Institute.