

Center for Cognitive Science

University at Buffalo, State University of New York

Wednesday, November 30, 2005

280 Park Hall
North Campus
2:00 pm –4:00 pm

Deb Roy, Ph.D.

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Department of Media Arts and Sciences
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"Meaning Machines"

Sponsored by the Department of Computer Science and Engineering, UB

The meaning of words in everyday situated language use depends on physical and social context. Our group is building robots and computer game players that use situated language as a way to study and model the physical and social grounding of semantics. Emerging from these implementations are conceptual representations underlying word meanings based on semiotic schemas, perceived affordances, and spatial routines. We are using these representations and associated learning algorithms to develop computational models of language acquisition that “step into the shoes” of children and learn directly from what children hear and see. I will provide an overview of our research program and highlight our recently launched Human Speechome Project which is poised to collect and model an unprecedented level of in-home audio-visual observational data of child language development from birth to age three.

Refreshments will be available; Open to the public!