

# The School of Informatics and Computing Colloquium Series



**Ken Forbus**

**NORTHWESTERN  
UNIVERSITY**

Friday, October 28, 2011

3:00-4:00 p.m.

Informatics East, Rm. 130

## **Towards human-level AI: Companion cognitive systems**

**Abstract:** Our hypothesis is that a critical step towards human-level AI is to create software social organisms, systems that can be treated as collaborators rather than tools. Our Companion cognitive architecture is based on this approach. This talk will describe our vision for Companions, our hypothesis that analogy and qualitative reasoning are central to human cognition (using examples involving visual problem solving, physics problem solving, classification, and moral decision-making), some experiments conducted with the architecture, and where we are going next.

**Biography:** Kenneth D. Forbus is the Walter P. Murphy Professor of Computer Science and Professor of Education at Northwestern University. He received his degrees from MIT (Ph.D. in 1984), and is a Fellow of the Association for the Advancement of Artificial Intelligence, the Cognitive Science Society, and the Association for Computing Machinery. He is currently Chair of the Cognitive Science Society. His research interests include qualitative reasoning, analogical reasoning and learning, spatial reasoning, cognitive architecture, intelligent educational software, and reasoning system design



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