“Affect- and Attention- Aware Cyberlearning”

Dr. Sidney K. D’Mello
University of Notre Dame, USA

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12:00 – 1:30 pm
Harrington Tower 301

Abstract
It is hypothesized that next-generation advanced learning technologies should have some mechanism to sense and respond to students’ affective and attentional states in addition to their knowledge levels. Towards this end, we have been engaging in computational modeling of complex mental states, such as confusion, frustration, and mind wandering, using facial features, physiology, eye gaze, and contextual cues in learning contexts ranging from educational games to intelligent tutoring systems. These computer models are embedded in advanced learning technologies that dynamically tailor their instructional strategies in a manner that is sensitive to the sensed states. This talk will discuss key results and insights along with persistent and novel challenges.

Biographical Note
Sidney D’Mello is an Assistant Professor in Computer Science and Psychology at the University of Notre Dame. His specific research interests include affective computing, artificial intelligence, human-computer interaction, natural language understanding, and computational models of human cognition. He has co-edited five books and has published over 180 journal papers, book chapters, and conference proceedings in these areas. D’Mello’s work has received nine best/outstanding paper awards at international conferences, has been featured in several media outlets including the Wall Street Journal, and has been supported by the National Science Foundation, Institute for Education Sciences, and the Gates, Raikes, and Templeton Foundations. D’Mello is an associate editor for IEEE Transactions on Affective Computing and IEEE Transactions on Learning Technologies, a senior reviewer for the Journal of Educational Psychology, and serves on the executive board of the International Artificial Intelligence in Education Society and Educational Data Mining Society. D’Mello received his PhD. in Computer Science from the University of Memphis in 2009.