



Mark Guzdial

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Thursday, January 31, 2013

9:00-10:00am

State Room East, IMU

Topic: Three Lessons in Teaching Computing To Everyone

Abstract: My colleagues and I have been studying how to teach computer science, to CS majors, to non-CS undergraduates, and to adult professionals. In this talk, I'll talk about some of what we've learned, organized around three lessons. Lesson #1: We typically teach computer science too abstractly, and by teaching it in a context (e.g., media, robots, Nintendo GameBoys, Photoshop), we can dramatically improve success (retention and learning) for both traditional and non-traditional CS learners. Lesson #2: Collaboration can create opportunities for learning, but classroom culture (e.g., competition) trumps technology (Wikis). Lesson #3: Our greatest challenge in computer science education is improving teaching, and that will require changes in high schools, in public policy, and in universities.

Biography: Mark Guzdial is a Professor in the School of Interactive Computing in the College of Computing at Georgia Institute of Technology. His research focuses on learning sciences and technology, specifically, computing education research. He has published several books on the use of media as a context for learning computing. He was the original developer of the "Swiki" which was the first wiki designed for educational use. He was awarded a joint Ph.D. degree in Education and Computer Science from the University of Michigan in 1993. He serves on the ACM's Education Council and the Special Interest Group in CS Education (SIGCSE) Board, and is on the editorial boards of the "Journal of the Learning Sciences," "ACM Transactions on Computing Education," and "Communications of the ACM." With his wife and colleague, Barbara Ericson, he received the 2010 ACM Karl V. Karlstrom Outstanding Educator award. He was also the recipient of the 2012 IEEE Computer Society Undergraduate Teaching Award.