Maya Israel, Ph.D.
Assistant Professor, Department of Special Education, University of Illinois at Urbana-Champaign

Teaching computer science to K-8 students at risk for academic failure: Research findings and implications for practice

Abstract: This presentation will focus on a series of studies examining how to support students at risk for academic failure, including students with learning disabilities in school-wide computer science instruction at the elementary and middle school levels. Specific attention will be spent on (1) measuring variables such as persistence, collaborative problem solving, and adaptive help seeking, (2) integration of computing into mathematics, and (3) successful strategies for increasing engagement and learning for students who struggle.

Bio: Maya Israel, Ph.D. is an assistant professor in the College of Education at the University of Illinois at Urbana Champaign. Her primary areas of specialization include supporting students with disabilities and other struggling learners’ meaningful engagement in science, technology, engineering, and mathematics (STEM) with emphases on computational thinking and computer programming. She researches accessible instructional models and technologies that promote student engagement, collaborative problem solving, and persistence. She is currently Co-PI on an NSF STEM+C grant to create learning trajectories that align computational thinking with math instruction. She has published in top-ranking journals such as Exceptional Children, Journal of Research on Technology in Education, Journal of Research in Science Teaching, and Computers & Education. She serves on the national K-12 Computer Science Framework writing team and supports school district initiatives focused on issues related to making computing education accessible and engaging to struggling learners.

14:00 – 15:00 on Monday July 25, 2016—Room 202, Alon Building (37/202)
(202/37)