Seminar

Outcome-based Course Design using Instructional Module Development System (IMODS)

Abstract. The road to effective STEM instruction starts with a well-conceived and constructed plan or curriculum that includes an alignment of content, pedagogical approaches and assessments, around the learning objectives, and draws upon best-practices in each of these areas. Instructional Module Development System (IMODS) is a web-based software tool that (i) guides instructors, step-by-step, through an outcome-based education process as they define learning objectives, select content to be covered, develop an instruction and assessment plan, and define the learning environment and context for their course(s); (ii) contains a repository of current best pedagogical and assessment practices, and based on selections the user makes when defining the learning objectives of the course, the system will present options for assessment and instruction that align with the type/level of student learning desired. In this talk, an overview of outcome-based course design process and the IMOD software system will be presented. Project Website: http://imod.poly.asu.edu/

Biography. Srividya Bansal is Associate Professor in Ira A. Fulton Schools of Engineering at Arizona State University. Her primary research focuses on semantics-based approaches for Big Data Integration, Web service description, discovery & composition, engineering education, and outcome-based instruction design in STEM education. She is also interested in software engineering education research that focuses on experimenting various delivery models in project-centric courses. She designed and developed a Web service description language called USDL (Universal Service-Semantics Description Language). She is the principal investigator of the Instructional Module Development System (IMODS) funded by National Science Foundation. She is a co-PI of the CircuitTutor project that is a step-based tutoring tool for Circuit Analysis supported by National Science Foundation. She received a PhD in Computer Science from the University of Texas at Dallas. She joined ASU in Fall 2010. Prior to ASU, she was a visiting assistant professor at Georgetown University in Washington, D.C. She also worked in the industry for five years as a software engineer at SAP Labs India and Tyler Technologies in Plano, Texas. She is a member of the IEEE Computer Society and ACM.

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Thursday April 18, 2019
Time: 2:00 – 2:50pm
Room: Bate 1016

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