

THE DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE, CS DIVISION



Presents the Spring 2014 EECS Seminar Series

Jeff Gray Department of Computer Science, University of Alabama

"Supporting Software Evolution through Model Transformation" Thursday, January 9, 2014 • 1:00 p.m. • HEC 356 (Note the Room!)

ABSTRACT

Model-Driven Engineering (MDE) represents a design approach that enables description of the essential characteristics of a problem in a manner that is decoupled from the details of a specific solution space (e.g., dependence on specific middleware or programming language). Within the scope of MDE research and development, software evolution and transformation at higher levels of abstraction have generated several new research topics, such as model-driven program transformation and model transformation by-example. This presentation provides a brief introduction to MDE with a specific focus on the capability to evolve software artifacts through model transformation and program transformation. The talk will highlight the need to involve end-users in the modeling process through various "By Demonstration" approaches.

BIOGRAPHY

Jeff Gray is an Associate Professor in the Department of Computer Science at the University of Alabama. He received a Ph.D. from Vanderbilt University and BS/MS from West Virginia University, all in Computer Science. Jeff's research interests include model-driven engineering, aspect-oriented software development, software evolution, mobile computing, and topics in Computer Science Education. He has recently published on these topics in IEEE Software, Communications of the ACM and IEEE Computer. Jeff's work has been supported by Google, IBM, DARPA, US Air Force, Department of Education, and NSF (including a 2007 NSF CAREER award). In Fall 2008, he was named the Alabama Professor of the Year by the Carnegie Foundation. He most recently served as General Chair of the MODELS 2013 conference. Over the past three years, he has been a national Pilot teacher for the new CS Principles course and serves as an Editor for the College Board's teaching guide on CS Principles. He is on the Educational Advisory Council for Code.org. More information about his work can be found at http://gray.cs.ua.edu