Aspectual Modeling in Middleware Applications
Premkumar Devanbu
University of California at Davis

Abstract

Aspect-orientation turns out to be useful in model-driven programming in middleware systems. In this talk, we explore two different lines of work: DADO, and MOBYL, where aspectual modeling is used in the usual Model-driven style for abstraction, code generation, typeful programming, etc. (but for different ends):

DADO is a CORBA extension where aspectual modeling is used to develop cross-cutting concerns like security and fault-tolerance that span across different machines.

MOBYL is a CORBA extension which allows middleware-based applications to selectively bypass the middleware platform where the application doesn't need it, providing essential increase in speed.

Dr. Devanbu has been awarded support from the National Science Foundation (NSF) in the following areas: Computer and Information Science and Engineering, Science of Design, and Human & Social Dynamics; the DARPA OASIS program; as well as an IBM Faculty Partnership.

Biography

Premkumar (Prem) Devanbu earned his B.Tech from the Indian Institute of Technology at Chennai, India, and his M.S. and Ph.D from Rutgers University in Piscataway, NJ. He has been on the faculty at University of California, Davis, since January 1998. Prior to his current appointment, he was a research staff member at AT&T/Bell Laboratories in its various avatars. His research interests during his career have included software tools, metrics, information security, middleware, and most recently open-source software.

Thursday, March 22, 2007 at 3:30pm
223 Atanasoff Hall
Refreshments will be served!