

THE UNIVERSITY OF ALABAMA

DEPARTMENT OF COMPUTER SCIENCE

Model Driven Approaches to Managing Software Performance

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Abstract: Performance - responsiveness and scalability is key quality for software systems. Proactively building performance into software helps construct software systems that meet performance objectives. Model driven development (MDD) provides ways to build systematic, quantitative approaches to managing performance. This talk presents the author's research of model driven methods, tools and practices that address performance requirements at different lifecycles of software development. This talk also highlights the research challenges and opportunities when applying MDD in various domains.

Biography: Yan Liu is a senior scientist at Pacific Northwest National Laboratory. Her current research involves software architecture, model driven development, software performance engineering, and adaptive systems. She has published over 50 research papers in these areas since 2004, including journal papers at TSE, SPE and JSS and best conference papers at WICSA and ASWEC. Yan received her PhD in Computer Science from University of Sydney, Australia in 2004.