INTEGRATED CIRCUITS AND SYSTEMS GROUP (ICSG)
THE ICS SEMINAR SERIES

Dr. Jacob Kornerup
National Instruments, Austin

Graphical System Design

Designers of today's embedded systems are faced with numerous challenges in the process of going from idea to deliverable product. These challenges are growing as systems are becoming more complex and flexible and require more involvement throughout the design flow from domain experts.

A Graphical System Design Platform abstracts the growing complexity of designing embedded systems by offering intuitive graphical programming integrated with flexible, COTS hardware and optimized for domain experts needing a faster design process. The integrated hardware provides a customizable, robust design, prototyping and deployment platform which enables faster design iterations for rapidly changing designs, and integrates real-world I/O early in the design process for higher-quality results.

In this presentation I will give an overview of the challenges that many of our customers are facing when they are building embedded systems. I will then present National Instruments' vision for Graphical System Design and illustrate some of the steps we are taking to realize this vision through a demo of a prototype system that combines graphical programming with system configuration and DSP algorithm development.

Biography:

Jacob Kornerup is a Senior Software Engineer on the LabVIEW R&D team at National Instruments, where he is working on delivering a graphical system design tool for embedded measurement and control systems. His prior work has focused on representing timing and different models of computation in the LabVIEW graphical programming language and the implementation of Deterministic Ethernet Protocols. Jacob has a PhD in Computer Science from the University of Texas at Austin. Prior to joining National Instruments, he was an assistant professor in Computer Science at Southern Methodist University.

Wednesday, March 31, 2010, ACES 2.402, 5:00-6:00pm
http://icsg.ece.utexas.edu/ics-seminar/