Electrical & Computer ENGINEERING

SEMINAR

THURSDAY
SEPTEMBER 21, 2006

Scaife Hall Auditorium
Room 125

4:30 p.m.
Refreshments—4:00 p.m.

DAVE PARLOUR

XILINX

David B. Parlour received the B.S. degree in engineering from Carleton University (Ottawa, Canada) and the M.S. degree from the California Institute of Technology (Pasadena, CA). In 1990, he joined Xilinx Inc. (San Jose, CA), where he has worked on a variety of projects involving the design of circuits, architectures, tools and methodologies for field-programmable gate arrays. He is currently a Principal Engineer in the Xilinx DSP Division's Advanced Systems Technology Group, where his main focus is domain-specific programming models and high-level synthesis tools for platform FPGA design.

ECE Seminar Hosts:
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An Actor/dataflow Programming Model for Platform FPGAs

Over the last decade the FPGA has evolved from its modest beginnings as a "glue logic" device, to become a true programmable platform offering large amounts of fine- and course-grained logic combined with embedded soft and hard CPUs, a memory hierarchy, and high-speed communications. While the potential power of these heterogeneous resources is enormous, the FPGA's "time to market" value proposition is threatened by design and programming challenges.

This talk will describe a practical effort to apply some well-known concepts from the field of concurrent systems modeling to the problem of programming the heterogeneous mix of resources on a platform FPGA. The motivations and figures of merit that drive the development of new design methodologies in an industrial setting will be a particular point of emphasis.

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