Session 27: Embedded Tutorial: Hardware-Software Co-Design

Chair: Gaetano Borriello

Hardware-software co-design, embedded system design, and Electronic System Design Automation (ESDA) are all topics that have recently attracted the attention of both researchers and the trade areas. This session will attempt to identify the real problems in these emerging areas and to survey work that is going on to address these problems. The first talk gives a brief survey of the problems in hardware-software design and an overview of current progress on the problems. The second talk goes more deeply into the specific problem of the specification and synthesis of hardware-software systems. The third talk addresses another key problem of hardware-software co-design: co-simulation of hardware-software systems.

27.1 Hardware-Software Co-Design and ESDA
Kurt Keutzer

27.2 Manifestations of Heterogeneity in Hardware-Software Codesign
Asawaree Kalavade, Edward A. Lee

27.3 Hardware/Software Co-Simulation
James A. Rowson