Embedded Systems Education

Chair: Sharad Malik, Princeton University
Organizers: Asawaree Kalavade, Lucent Bell Labs.
Sharad Malik, Princeton University
Jan Rabaey, U. C. Berkeley

Abstract

The design and design automation of embedded systems is rapidly emerging as a research area in its own right. It draws from several traditional areas of study such as system specification, modeling and analysis; computer architecture and micro-architecture; as well as compilers and operating systems. However, the embedded domain adds some interesting twists in terms of tighter problem constraints that demand a fresh look at even these traditional areas. In addition, there are several emerging EDA areas such as design reuse and integration of systems on a chip that are critical to the study of embedded systems. These aspects are not typically covered by computer engineering and EDA curricula. This panel addresses the challenges associated with the educational issues in embedded systems design and design automation. The panelists will examine issues in including embedded systems in university curricula, as well as in setting up research programs that are crucial for the education of graduate students.

The panel of distinguished members have all grappled with these issues and will share their experiences in setting up various programs, as well as point out changes we should be looking at for the future.

Panelists

- D. K. Arvind, University of Edinburgh, Edinburgh, U. K.
- Edward Lee, University of California, Berkeley
- Phil Koopman, Carnegie Mellon University
- Alberto Sangiovanni-Vincentelli, University of California, Berkeley
- Wayne Wolf, Princeton University