

International Conference
on
Embedded Systems (Ices 2010) – 14th – 16th July 2010

The International Conference on Embedded Systems was organized by Coimbatore Institute of Technology, Coimbatore jointly with Oklahoma State University, Stillwater, USA during July 14 -16, 2010.

The extensive and increasing use of embedded systems and their integration in everyday products marks a significant evolution in information science and technology. The inevitable need for Smart systems has necessitated the emergence of embedded systems as a discipline in its own right. With this objective in focus, the International Conference ICES 2010 was organized with the theme “Search for Smart Systems”. The goals of the International Conference on Embedded Systems were to present exchange and discuss the state of the art, novel ideas, actual research results and future trends in the field of Embedded Systems.

The response to call for papers well exceeded our expectations. 380 draft submissions were received from academic and Industry participants out of which 158 papers were selected for presentation during the technical sessions of the Conference after a dual review process by experts in the field. The overseas response to the Conference is a proof of the global interest in this emerging field. The papers have been published in this proceeding, which has been edited by the Conference Editorial committee. Through the efforts of our authors, we feel we have achieved our objective of presenting a body of work representing the diverse approaches, viewpoints, and research issues in our field. 15 technical sessions were organized spanning the core and allied areas of the Embedded Systems domain. The highlight of the Conference were the Keynote addresses by experts from India and abroad. Dr. Efreem. G. Mallach, Associate Professor of Management Information Systems, Charlton College of Business, University of Massachusetts, USA delivered the first keynote lecture on the topic “Embedded Systems-Lessons from History”. A presentation on “Dependable System Architecture toward Social Value Infrastructure Development” was done by Prof. Eddie Ohtsuru, R&D Managing Director, Fukuoka Industry Science and Technology Foundation, Japan. Dr. Rama Ramakumar, Director of Engineering Energy Laboratory, Oklahoma State University, USA delivered the keynote on the topic “Buzz about Smart Grids”. Dr. Kavi Arya, Associate Professor of Computer Science and Engineering, IITB, Mumbai spoke about “Model based design of Embedded Systems and Challenges”. The final keynote was by Dr. Sohum Sohoni, School of Electrical and Computer Engineering, Oklahoma State University, USA on the topic “General Purpose Embedded Processing in Many-Core Systems”.

A Pre-Conference workshop was organized with participation from Industries. The technical presentations during the workshop exposed the participants to the latest technology trends in the Embedded arena and motivated the young minds to take up research that will cater to the needs of the Industry and society. The topics covered during the Pre-Conference workshop were "Latest developments in Automotive Embedded Systems by Shri. R.D.Shevade, Delphi Automotive Systems, Bangalore, “Innovation in Embedded systems by Dr. V. Ranganathan, Arigami Semiconductors, Chennai and Mr. Navneet Bhushan, CRAFTITI CONSULTING, “Embedded Systems in Bio-Engineering” by Dr.Srinivasan Jayaraman, TCS Innovation Labs, Bangalore

A panel discussion was held on the first day of the Conference which provided a forum for eminent persons to interact and explore solutions to the various challenges pertaining to implementation of Embedded Systems. The deliberations of the Conference were structured into parallel technical sessions under the following topics: Embedded System Applications, Image Processing, Optimization and Cryptography, Electrical Engineering and Automation, Communication and Networking, Wireless Systems, Robotics and Automation, Computer and Data Mining, FPGA and VLSI, DSP and Speech Processing, Digital Systems and Computer Applications. The papers presented in the various sessions stood testimony to the interest of the research community in the field of Embedded Systems and was definitely a common platform for academia and Industry to share their ideas and expectations.

ICES 2010 was jointly organized with Oklahoma State University, Stillwater, USA and supported by IEEE Madras Section, Department of Information Technology, Government of India, Department of Atomic Energy, DRDO, Delphi Automotive Systems, Bangalore, Tata Consultancy Services, Mumbai, Council of Scientific and Industrial Research, New Delhi, and Science City, Government of Tamilnadu. The theme “Search for Smart Systems” was synergistic with the goals of the Conference. The Conference started with the Inaugural address by Prof. Dr. K. Karunakaran, Vice Chancellor, Anna University Coimbatore on the forenoon of 14th July, 2010 and the Valedictory address was delivered by Dr. Keith. A. Teague, Professor and Head, School of Electrical and Computer Engineering, Oklahoma State University.

ICES 2010 has paved way for merger of ideas through which knowledge and experience can be shared, transferred and ultimately be generated. The benefits of this Conference has been definitely reaped by students, application engineers and research scholars in terms of knowledge enrichment, development of spirit of innovation and research motivation.

