Welcome to ICCD 2013!

On behalf of the organizing and program committees, we welcome you to the 31st IEEE International Conference on Computer Design. ICCD is co-sponsored by the IEEE Computer Society and the IEEE Circuits and Systems Society. It covers a broad range of topics at all levels of computer system design, from logic and circuits to architecture and applications, including the tools and processes used for design, test, verification, and security. This makes it a fertile environment for cross-layer discussions and interactions.

The host city for this year’s conference is Asheville, North Carolina. Nestled in the Blue Ridge Mountains, Asheville is known for its lively arts and music scene, prolific local breweries, eclectic restaurants, and beautiful fall foliage. We hope you enjoy the city’s Southern charm and hospitality.

The conference program consists of technical papers submitted to the program committee for evaluation. The papers were selected after a rigorous peer-review process, with an average of four reviews per paper. The papers were submitted to one of the five conference tracks: Computer Systems and Applications; Processor Architecture; Logic and Circuit Design; Electronic Design Automation; and Test, Verification and Security. The track committees are composed of international experts in their disciplines. After individual reviews were completed, each paper was discussed collectively by the track committee, to ensure equity and consistency in the selection process (papers authored by track chairs are discussed separately to avoid conflicts of interest). The program chairs reviewed the selections from the five track committees and finalized the program. The accepted presentations are organized by topic in regular technical sessions in the conference program. Each track committee also chose a Best Paper, and these are showcased in a special plenary session.

In addition to the contributed papers, the technical program also includes four exciting keynotes by Arvind (MIT), Jason Cong (UCLA), Mark Hempstead (Drexel), and Rajesh Gupta (UCSD). The program also features a special session of invited papers on innovative multicore implementations, and an interactive poster session for promising future work. New this year are the Lightning Sessions, in which each paper is summarized in 100 seconds. This gives the attendees a glimpse of all the papers in the parallel technical sessions and should stimulate some interesting hallway conversations.

ICCD has been always a truly international conference, with participation from researchers and developers from academic institutions, research laboratories, and industry design and development groups throughout the world. This year, paper submissions were received from 29 countries. Of the 223 papers submitted, the track committees accepted 56 papers (25%) for inclusion in the conference proceedings and for presentation at the conference. An additional 22 papers were invited for presentation at the poster session. We would like to thank the 177 program committee members (from 30 countries), and especially the 10 track committee chairs, for their dedication and diligence in selecting an exceptional set of technical presentations. The investment of their time and their insights are very much appreciated.

Of course, ICCD would not happen without the innovation and hard work from the authors. Thanks to all of them as well! We also thank our colleagues on the organizing committee for their contributions and their support. The outstanding conference program at ICCD 2013 is a result of many individuals who contributed their time and expertise leading up to the event. The culmination of their efforts is the technical interchange, informal discussion, and personal communication that can only occur at the conference itself. On behalf of the entire committee, we hope you have a rewarding and enjoyable time at the conference.

Greg Byrd,  
Klaus Schneider  
General Chairs, ICCD 2013

Naehyuck Chang,  
Sule Ozev  
Program Chairs, ICCD 2013