54 DESIGN AUTOMATION CONFERENCE

CALL FOR CONTRIBUTIONS

RESEARCH MANUSCRIPT SUBMISSION

DAC is the premier event to showcase cutting-edge research achievements in the design and design automation of electronic circuits and systems. In addition to the usual topics, 2017 DAC especially welcomes high-quality papers on design of circuits, architectures, and systems. It will also feature special themes including automotive electronics, security, IP and Internet of Things.

Abstract Deadline – November 15, 2016

Manuscript Deadline – November 22, 2016

DESIGNER/IP TRACK SUBMISSION

This year, Designer Track and IP Track are interweaved to encourage more synergy between designers and IP developers, will include presentations, poster sessions and a rich set of invited talks/panels to facilitate information exchange and interactions. It offers a unique opportunity to network with and learn from other industry experts about best practices and current trends.

Submission Deadline – January 24, 2017

PANEL PROPOSAL

Technical panels are organized as sessions within the technical conference program. Panels are intended to be of broad interest and attract a large audience. Panel topics should be interesting and timely, and the panels themselves should be engaging and informative.

Submission Deadline – November 15, 2016

SPECIAL SESSION PROPOSAL

Special sessions are broad-interest sessions within the technical conference program. Topics span core EDA, embedded systems and software, automotive, security, design and future interest areas. A key aspect of special sessions is that they should be interesting, timely, informative and enlightening.

Submission Deadline – November 15, 2016

TUTORIAL PROPOSAL

DAC is looking for timely, relevant and tangible hands-on topics that provide immediate value and learning for its attendees on design, methodology, design automation fundamentals, as well as automotive electronics, hardware and embedded system security, and Internet of Things.

Submission Deadline – November 15, 2016

WORKSHOP PROPOSAL

DAC invites you to submit a workshop on emerging topics related to design, design methodologies, and design automation, as well as automotive electronics, hardware and embedded system security, and Internet of Things.

Submission Deadline – November 15, 2016

COLOCATED CONFERENCE PROPOSAL

Save your attendees and your organization time and money by colocating your conference with the 54th Design Automation Conference in Austin, Texas, June 18-22, 2017.

Submission Deadline – November 15, 2016

DAC.com • June 18-22, 2017 • Austin, TX

#54DAC

DAC is accepting submissions for the Research Track, Designer Track, and IP Track on the following themes: Electronic Design Automation (EDA), Electronic Systems and Software (ESS), Design, IP, the Internet of Things (IoT), Automotive, and Security.

EDA SESSIONS

EDA (Electronics Design Automation) is becoming ever more important with the continuous scaling of semiconductor devices and the growing complexities of their use in circuits and systems. Demands for lower-power, higher-reliability and more agile electronic systems raise new challenges to both design and design automation of such systems. For the past five decades, the primary focus of research track at DAC has been to showcase leading-edge research and practice in tools and methodologies for the design of circuits and systems.

In addition to the traditional EDA topics ranges from physical design to system architectures, DAC 2017 features high-quality papers on design research, design practices, and design automation for cross-cutting topics including low-power, reliability, multicore/application specific/heterogeneous architectures, 3-D integrations, emerging device technologies, design automation of "things", and their applications. DAC's EDA technical program has been ensuring the best-in-class solutions that promise to advance EDA.

ESS SESSIONS

Embedded systems are an increasingly interesting, disruptive, and challenging field for designs ranging from mobile devices to medical devices to industrial and beyond. Embedded software is built into devices that may not necessarily be recognized as computing devices (e.g., thermostats, toys, defibrillators, and anti-lock brakes), but nevertheless controls the functionality and perceived quality of these devices. Embedded systems design is the art of choosing and designing the proper combination of hardware and software components to achieve system level design goals like speed, efficiency, reliability, security, and safety. Embedded software is taking a growing role in the final solution.

The Embedded Systems and Software sessions at DAC provide a forum for discussing the challenges of embedded design and an opportunity for leaders in the industry and academia to come together to exchange ideas and roadmaps for the future for this rapidly expanding area

DESIGNER/IP SESSIONS

Design content will be highlighted in both the Designer Track and the Research Track. We seek high-quality work in the area of design and verification for cross-cutting topics including low-power, reliability, multicore/application specific/heterogeneous architectures, 3-D integrations, emerging device technologies, cyberphysical systems, IoT, design automation of "things", and their applications. For design and verification focused contents, they can either be submitted to the regular Research Track or to the Designer Track. If submitting to the Research Track, the same submission format and review process as other EDA and ESS areas apply. If submitting to the Designer Track, please follow the format specified by the Designer Track.

Intellectual Property (IP) content will be highlighted in both the IP Track and the regular Research Track. We seek high-quality work on design research and design practices for cross-cutting topics including low-power, reliability, multicore/application specific/heterogeneous architectures, 3-D integrations, emerging device technologies, cyberphysical systems, IoT, design automation of "things", and their applications.

IOT SESSIONS

The Internet of Things (IoT) is the next wave in electronic systems. Its definition is inherently broad, encompassing everything from industrial automation, to wearable devices, to home security. Its components range from energy harvesters and smart sensors to data centers. What's needed to design these systems? IoT sessions at DAC aims to cover the entire spectrum, providing a holistic overview of IoT-related content in diverse areas, such as EDA methodologies and tools to reduce energy, lightweight authentication and security approaches, techniques for assembling needed IP for IoT systems, and methods for managing the complexity of automotive systems.

Each of these has a role to play in the IoT design landscape and yet each is a challenging problem in itself. The Internet of Things can sometimes seem vast and unmanageable. Let the IoT sessions at DAC simplify it for you.

AUTOMOTIVE SESSIONS

Automobiles today are complex electrical and electronic control systems. Nearly every aspect of the vehicle uses smart electronics and embedded software to make our transportation experience safer, more energy-efficient and enjoyable. Premium vehicles can have several million lines of embedded software running on hundreds of electronic control units connected not only with one another by in-vehicle networks but also to the cloud, other vehicles and infrastructure. As the trend towards automated driving and connectivity accelerates, the ability to deliver these innovations depends more than ever on the electronics and software development capabilities. Mastering the enormous functional complexity while satisfying safety, security as well as cost constraints requires powerful methods and tools for all development steps.

The Automotive sessions at DAC provide a forum for people from automotive, embedded systems, security and EDA, to connect, engage, and exchange information. The sessions focused on automotive will highlight unique challenges, emerging solutions and explore the road ahead.

SECURITY SESSIONS

Security sessions at DAC address an urgent need to create, analyze, evaluate, and improve the hardware, embedded systems and software base of the contemporary security solutions. Secure and trustworthy software and hardware components, platforms and supply chains are vital to all domains including financial, healthcare, transportation, and energy. Security of systems is becoming equally important. A revolution is underway in many industries that are "connecting the unconnected". Such cyber physical systems, e.g., automobiles, smart grid, medical devices, etc., are taking advantage of integration of physical systems with the information systems. Notwithstanding the numerous benefits, these systems are appealing targets of attacks. Attacks on the cyber-part of such systems can have disastrous consequences in the physical world. The scope and variety of attacks on these systems present design challenges that span embedded hardware, software, networking, and system design.

Security topics will be featured through invited special sessions, panels, and lecture/poster presentations by both practitioners and researchers to share their knowledge and experience on this evolving environment.

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