Report on DATE 2017 in Lausanne

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■ **THE DESIGN, AUTOMATION,** and Test in Europe (DATE) 2017 Conference and Exhibition closed doors last Friday, March 31, 2017, receiving more than 1,500 registrations from over 50 countries and ending with excellent feedback from both participants and exhibitors. 2017 was a special year for the world's favorite electronic systems design and test conference, as the community celebrated its 20th edition, and it was held for the first time in Switzerland, at the SwissTech Convention Center on the EPFL campus in Lausanne, from March 27–31, 2017.

Report

DATE 2017 received 794 paper submissions, a large share (42%) coming from authors in Europe, 32% from America, 25% from Asia, and 1% from the rest of the world. This clearly demonstrates DATE's international character, its global reach, and impact.

For the 20th successive year, DATE presented an exciting technical program, comprising 78 technical sessions and 11 exhibition theater sessions. The DATE week started on Monday with nine in-depth tutorials and the popular Ph.D. Forum, hosted by European Design and Automation Association (EDAA), ACM Special Interest Group on Design Automation (SIGDA), and IEEE Council on Electronic Design Automation (CEDA).

On Tuesday, the conference was opened by the plenary keynote speakers Dr. Arvind Krishna from IBM presenting "Design Automation in the Era of AI and IoT: Challenges and Pitfalls" (see Figure 1) and

Dr. Doug Burger from Microsoft, who talked about "A New Era of Hardware Microservices in the Cloud." In addition, a keynote lecture by Prof. Giovanni De Micheli (Professor at EPFL and Director of Nano-Tera.ch) was given on "Distributed Systems for Health and Environmental Monitoring" within the Nano-Tera.ch initiative. On the same day, an Executive Panel Session and three Innovative Technologies and Applications (IT&A) Sessions offered a series of business panels discussing hot topics. Executive speakers from companies leading the design and automation industry addressed some of the complexity issues in electronics design and discussed the advanced technology challenges and opportunities. A special session was dedicated to
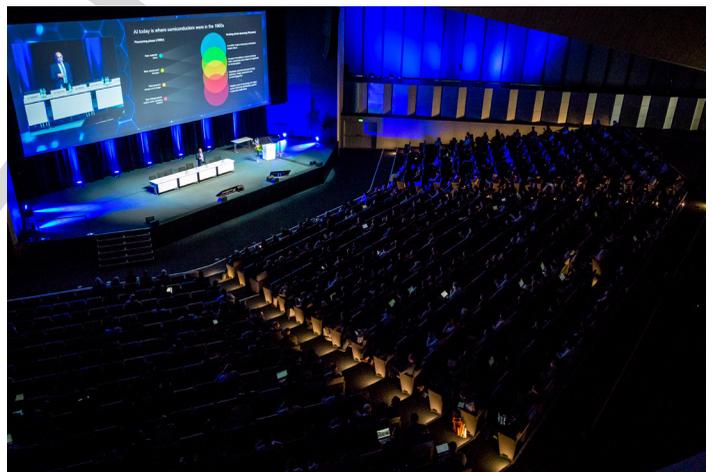

Figure 1. Dr. Arvind Krishna (IBM) during his keynote at DATE 2017 (Auditorium of SwissTech Convention Center at the EPFL campus), titled: "Design Automation in the Era of AI and IoT: Challenges and Pitfalls."

Figure 2. DATE 2017 atmosphere and active discussions during the Interactive Presentations Session in the coffee breaks.

Ralph Otten, pioneer of physical design, who prematurely died in an accident.

Two Special Days in the program focused on areas bringing new challenges to the system design community: Designing Electronics for the Internet of Things Era and Designing Wearable and Smart Medical Devices, each having a full program of keynotes, panels, tutorials, and technical presentations. On Wednesday, Keith Willett from Merck Serono gave the luncheon keynote titled "Internet of Everything is Our Opportunity." On Thursday, a keynote from Dr. Sani Nassif, Radyalis LLC, titled "The Engineering to Medicine Metamorphosis," gave interesting insights on new domains to exploit all the work done in the electronics and embedded systems design and automation (EDA) community.

The accompanying international exhibition ran for three days (Tuesday–Thursday) and hosted 21 exhibition booths with special emphasis on the areas of Internet of Things (IoT), cloud computing, and wearables and smart medical devices, covering system-level hardware and software. Furthermore, the popular University Booth animated the show with 39 demonstrations from 13 different countries. Another hot spot was the exhibition theater highlighting visionary talks from industrial leaders and best practice presentations. Contributions came from EPFL, Intel, MathWorks, Mentor Graphics, Microsoft, STMicroelectronics, and many more. It also featured a CV fair, where students met with companies in an informal setting to discuss opportunities for their professional career.

The DATE Party, *the* main networking event during the DATE week, was a unique experience for all attendees, as it took place in Lausanne's most outstanding museum location: The Olympic Museum. With its spectacular location in the heart of the city, visitors could enjoy magnificent views over Lake Geneva and the Swiss-French Alps. Furthermore, the local delights offered, as well as the possibility to visit the great exposition rooms, made it a memorable evening! Finally, the eight Friday Workshops attracted more than 450 attendees and completed the DATE week successfully.

DATE continues attracting high participant numbers and therefore manifests its status as the leading EDA conference worldwide, shaping the future of the industry. Indeed, DATE 2017, in its 20th edition, proved to be the top scientific event in design, automation, and test of microelectronics and embedded systems for the academic and industrial research communities worldwide. With the foundations of a really strong technical program, including a vibrant set of keynotes, special sessions, and also new technology demonstrators in the exhibition, the numerous designers, developers, executives, researchers, and professors that attended DATE in Lausanne (see Figure 2) had the opportunity to show and discuss their latest technologies, products, research results, and vision to shape the future of next-generation IoT systems and smart wearable devices. DATE 2017 provided a perfect gathering environment for enabling the thinking of tomorrow's technologies to improve the quality of life and energy efficiency of our society.

To review a selection of the best pictures of the DATE conference, please visit: www.date-conference.com.

■ **IN 2018, THE DATE CONFERENCE** will take place in Dresden, Germany, on March 19–23, 2018—once again bringing together industry and research in partnership. We are already looking forward to welcoming you in Dresden for the next DATE 2018 conference! ∎

■ Direct questions and comments about this article to David Atienza, General Chair of DATE 2017; david.atienza@epfl.ch.