From the EIC

Intelligent Resource-Constrained Sensor Nodes

■ **THIS ISSUE OF** *IEEE Design&Test (D&T)* focuses on designing sensor networks with specific emphasis on how to make them intelligent. With this, we have another special issue that represents *D&T*'s extension in the system-of-systems field.

One highlight is the survey article of the GE team focusing on energy optimization with means of smart adaptive techniques. Another highlight is the keynote within this special issue, "The Internet of Tiny Things: Recent Advances of Millimeter-Scale Computing," which focusses on ultralow power and shows what is possible in what is called *millimeter-scale computing*. Thanks to the Guest Editors Shreyas Sen, Arijit Raychowdhury, and Shih-Lien L. Lu for bringing this hot topic to *D&T*.

Additionally, this issue has two general interest articles. In "A Diagnosable Network-on-Chip for FPGA Verification of Intellectual Properties," the authors describe a debugging system. It is a solution to the problem of analyzing IP from various sources where the TPs might not correctly communicate with each other in an FPGA-based evaluation. In "Absolute Energy Routing and Real-Time Power Monitoring for Grid-Connected Distribution Networks," the authors propose a new routing technique that helps in prioritizing load flow and data flow.

The 2018 International Conference on Computer-Aided Design took place in San Diego, CA, on 4–8 November 2018. Thanks to the General Chair R. Iris Bahar for the report and to our Reports Editor Massimo Poncino.

As always, last but not least, many thanks to Scott Davidson for The Last Byte article, "I Have Met the IoT Security Enemy and He Is Us."

Many thanks to all who have contributed to this issue of *D&T*. ■

Jörg Henkel
Editor-in-Chief
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