### **DATE Best Paper Awards**

Each year the Design, Automation and Test in Europe Conference presents awards to the authors of the best papers. The selection is performed by the award committee.

The **DATE 2018** best papers are:

#### D Track

## Efficient Verification Of Multi-Property Designs (The Benefit Of Wrong Assumptions)

Eugene Goldberg<sup>1</sup>, Matthias Gudemann<sup>1</sup>, Daniel Kroening<sup>1</sup>, Rajdeep Mukherjee<sup>2</sup> 1 DiffBlue, 2 Oxford University

#### A Track

## MATIC: Learning Around Errors for Efficient Low-Voltage Neural Network Accelerators

Sung Kim, Patrick Howe, Thierry Moreau, Armin Alaghi, Luis Ceze and Visvesh Sathe
University of Washington

#### T Track

### Low-Cost High-Accuracy Variation Characterization for Nanoscale IC Technologies via Novel Learning-based Techniques

Zhijian Pan<sup>1</sup>, Miao Li<sup>2</sup>, Jian Yao<sup>2</sup>, Hong Lu<sup>2</sup>, Zuochang Ye<sup>1</sup>, Yanfeng Li<sup>2</sup>, Yan Wang<sup>1</sup> 1 Tsinghua University, 2 Platform Design Automation, Inc.

#### **E Track**

# Buffer-aware bounds to multi-point progressive blocking in priority-preemptive NoCs

Leandro Indrusiak<sup>1</sup>, Alan Burns<sup>2</sup>, Borislav Nikolic<sup>3</sup> 1 University of York, 2 University of York, 3 CISTER/INESC-TEC, ISEP, IPP

## **Best Paper Award Nominations**

#### D track

HVSM: Hardware-Variability Aware Streaming Processors' Management Policy in GPUs

Jingweijia Tan, Kaige Yan

Jilin University

Sensei: An Area-Reduction Advisor for FPGA High-Level Synthesis

Hsuan Hsiao, Jason H. Anderson University of Toronto

#### Multi-Bit Non-Volatile Spintronic Flip-Flop

Christopher Münch, Rajendra Bishnoi, Mehdi Tahoori Karlsruhe Institute of Technology

Trident: A Comprehensive Timing Error Resilient Technique against Choke Points at NTC

Aatreyi Bal, Sanghamitra Roy, Koushik Chakraborty
Utah State University

An Inside Job: Remote Power Analysis Attacks on FPGAs

Falk Schellenberg<sup>1</sup>, Dennis Gnad<sup>2</sup>, Amir Moradi<sup>1</sup>, Mehdi Tahoori<sup>2</sup> 1 Ruhr University Bochum, 2 Karlsruhe Institute of Technology

Compact Modeling of Carbon Nanotube Thin Film Transistors for Flexible Circuit Design Leilai Shao<sup>1</sup>, Tsung-Ching Huang<sup>2</sup>, Ting Lei<sup>3</sup>, Zhenan Bao<sup>3</sup>, Raymond Beausoleil<sup>2</sup>, Tim Cheng<sup>4</sup>
1 University of California Santa Barbara, 2 Hewlett Packard Labs,
3 Stanford University, 4 Hong Kong University of Science and Technology

CAMP: Accurate Modeling of Core and Memory Locality for Proxy Generation of Big-data Applications

Reena Panda, Xinnian Zheng, Andreas Gerstlauer, Lizy John University of Texas at Austin

**HME: A Lightweight Emulator for Hybrid Memory** 

Zhuohui Duan, Haikun Liu, Xiaofei Liao Huazhong University of Science and Technology

FFT-Based Deep Learning Deployment in Embedded Systems

Sheng Lin<sup>1</sup>, Ning Liu<sup>1</sup>, Mahdi Nazemi<sup>2</sup>, Hongjia Li<sup>1</sup>, Caiwen Ding<sup>1</sup>,
Yanzhi Wang<sup>2</sup>, Massoud Pedram<sup>2</sup>
1 Syracuse University, 2 University of Southern California

#### A Faithful Binary Circuit Model with Adversarial Noise

Matthias Fuegger<sup>1</sup>, Jürgen Maier<sup>2</sup>, Robert Najvirt<sup>2</sup>, Thomas Nowak<sup>3</sup>, Ulrich Schmid<sup>2</sup> 1 LSV, CNRS & ENS Paris-Saclay, 2 TU Wien, 3 Université Paris Sud

#### A track

HyVE: Hybrid Vertex-Edge Memory Hierarchy for Energy-Efficient Graph Processing
Tianhao Huang; Guohao Dai; Yu Wang; Huazhong Yang
Tsinghua University

GIS-Based Optimal Photovoltaic Panel Floorplanning for Residential Installations
Sara Vinco; Lorenzo Bottaccioli, Edoardo Patti, Andrea Acquaviva, Enrico Macii,
Massimo Poncino
Politecnico di Torino

A Fast and Resource Efficient FPGA Implementation of Secret Sharing for Storage Applications

Jakob Stangl<sup>1</sup>, Thomas Lorünser<sup>2</sup>, Sai Dinakarrao<sup>1</sup> 1 TU Wien, 2 Austrian Institute of Technology