

# Hall of Fame Inductees

Below are papers that have been inducted into the TCFPGA Hall of Fame. Nominations are secured each year, followed by detailed consideration by a panel of experts. The papers inducted to date appear below:

## Class of 2025

### **Optimizing FPGA-based Accelerator Design for Deep Convolutional Neural Networks**

Chen Zhang, Peng Li, Guangyu Sun, Yijin Guan, Bingjun Xiao, Jason Cong

Proceedings of the ACM/SIGDA International Symposium on Field Programmable Gate Arrays, 2015, pp. 161-170.

*Inducted at the ACM/SIGDA International Symposium on Field Programmable Gate Arrays, 28th February 2025*

([endorsement](#))

## Class of 2024

### **Designing custom arithmetic data paths with FloPoCo**

Florent De Dinechin, Bogdan Pasca

IEEE Design and Test, Vol. 28, No. 4, pp. 18-27, 2011

*Inducted at the International Conference on Field Programmable Logic and Applications, 5th September 2024*

## Class of 2023

### **Application-Specific Instruction Generation for Configurable Processor Architectures**

Jason Cong, Y. Fan, G. Han, Zhiru Zhang

Proceedings of the ACM/SIGDA International Symposium on Field Programmable Gate Arrays, 2004, pp. 183-189.

([endorsement](#))

### **JBits: Java based interface for reconfigurable computing**

Steve Guccione, Delon Levi and Prasanna Sundararajan

Proceedings of the 2nd Annual Military and Aerospace Applications of Programmable Devices and Technologies Conference, 1999.

([endorsement](#))

## Class of 2022

### **Improving FPGA Performance and Area Using an Adaptive Logic Module**

Mike Hutton, Jay Schleicher, David Lewis, Bruce Pedersen, Richard Yuan, Sinan Kaptanoglu, Gregg Baeckler, Boris Ratchev, Ketan Padalia, Mark Bourgeault, Andy Lee, Henry Kim and Rahul Saini  
14th Field Programmable Logic, 2004, pp. 135-144

([endorsement](#))

### **FCUDA: Enabling efficient compilation of CUDA kernels onto FPGAs**

Alexandros Papakonstantinou, Karthik Gururaj, John A. Stratton, Deming Chen, Jason Cong, Wen-Mei W. Hwu  
IEEE Symposium on Application Specific Processors, 2009, pp. 35-42

([endorsement](#))

### **An efficient and versatile scheduling algorithm based on SDC formulation**

Jason Cong and Zhiru Zhang  
Design Automation Conference, 2006, pp. 433-438

([endorsement](#))

## Class of 2021

### **Performance-Constrained Pipelining of Software Loops onto Reconfigurable Hardware**

Greg Snider  
International Symposium on FPGAs, Feb. 2002, Pages 177-186  
inducted at the International Symposium on Field-Programmable Gate Arrays on March 2, 2021

([endorsement](#))

### **Directional and Single-Driver Wires in FPGA Interconnect**

Guy Lemieux, Edmund Lee, Marvin Tom, and Anthony Yu  
2004 IEEE International Conference on Field-Programmable Technology, December 2004, Pages 41-48  
Inducted at the International Conference on Field-Programmable Technology on December 9, 2021

([endorsement](#))

## Class of 2020

### **ReconOS: Multithreaded Programming for Reconfigurable Computers**

Enno Lübbers and Marco Platzner  
IEEE Transactions on Embedded Computing Systems (TECS), Volume: 9, Issue: 1, October 2009

### **High-Quality, Deterministic Parallel Placement for FPGAs on Commodity Hardware**

Adrian Ludwin, Vaughn Betz and Ketan Padalia  
Proceedings of the 16th International ACM/SIGDA Symposium on Field Programmable Gate Arrays, pp 14-23, February 2008

[\(endorsement\)](#)

## Class of 2019

### **The Density Advantage of Configurable Computing**

André DeHon

IEEE Computer, Volume: 33 , Issue: 4, pp. 41-49, April 2000

[\(endorsement\)](#)

### **A High-performance Microarchitecture with Hardware-programmable Functional Units**

Rahul Razdan and Michael. D. Smith

roceedings of the 27th Annual International Symposium on Microarchitecture, pp. 172-180,  
Nov/Dec 1994

[\(endorsement\)](#)

### **Processor reconfiguration through instruction-set metamorphosis**

Peter M. Athanas and Harvey F. Silverman

IEEE Computer, Volume 26, Issue 3, pp 11-18, March 1993

[\(endorsement\)](#)

## Class of 2018

### **A User Programmable Reconfigurable Logic Array**

William S. Carter, Khue Duong, Ross H. Freeman, Hung-Cheng Hsieh, Jason Y. Ja, John E. Mahoney,  
Luan T. Ngo, Shelly L. Sze

Proceedings of the IEEE Custom Integrated Circuits Conference, pp. 233-235, 1986

[\(endorsement\)](#)

### **An Efficient Logic Emulation System**

Joseph Varghese, Michael Butts, and Jon Batcheller

IEEE Transactions on VLSI Systems, vol. 1, no. 2, pp. 171-174, June 1993

[\(endorsement\)](#)

### **Building and Using a Highly Parallel Programmable Logic Array**

Maya Gokhale, William Holmes, Andrew Kopser, Sara Lucas, Ronald Minnich, Douglas Sweely and  
Daniel Lopresti

IEEE Computer, vol. 24, no. 1, pp. 81-89, Jan. 1991

[\(endorsement\)](#)

## Class of 2017

## **FlowMap: An Optimal Technology Mapping Algorithm for Delay Optimization in Lookup-**

### **Table Based FPGA Designs**

Jason Cong and Yuzheng Ding

IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, vol. 13, no. 1, pp. 1-12, Jan 1994

([endorsement](#))

## **Programmable Active Memories: Reconfigurable Systems Come of Age**

Jean E. Vuillemin, Patrice Bertin, Didier Roncin, Mark Shand, Hervé Touati, and Philippe Boucard

IEEE Transactions on Very Large Scale Integration Systems, vol. 4, no. 1, pp. 56-69, March 1996

([endorsement](#))

## **A Defect-Tolerant Computer Architecture: Opportunities for Nanotechnology**

James R. Heath, Philip J. Kuekes, Gregory S. Snider, and R. Stanley Williams

Science, 12 Jun 1998, vol. 280, no. 5370, pp. 1716-1721

([endorsement](#))

# FPGA 20, FCCM 20, and FPL25 Class

All papers from the [FPGA 20](#), [FCCM 20](#), and [FPL 25](#) lists are also inductees in the Hall of Fame

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