Special Issue

FPGA-Based Deep Neural Network Accelerators Using Emerging Technologies

Message from the Guest Editor

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but not limited to) the following:

- Novel architecture for FPGA-based DNN accelerators;
- Hardware/software co-design for FPGA-based DNN accelerators:
- Resource/bandwidth optimizations for FPGA-based DNN accelerators;
- FPGA-based DNN accelerators using fast convolution algorithms;
- FPGA-based accelerators for sparse DNNs;
- FPGA-based DNN accelerators performing lowbit/mixed-bit quantization;
- FPGA-based DNN accelerators using approximate computing;
- Dynamically reconfigurable DNN accelerators;
- FPGA-based graph convolution neural network acceleration:
- FPGA-based spike neural network acceleration;
- FPGA-based transformer network acceleration;
- FPGA-based acceleration of other atypical convolutions/networks;
- Emerging applications of FPGA-based DNN accelerators.

Guest Editor

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Deadline for manuscript submissions

closed (20 October 2024)



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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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