Improving Energy Efficiency of Neural Networks

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Topic 1
Energy-efficient DNNs

Memory-augmented Neural Networks
+ Fixed-point Quantization
(IAAI-18)

Topic 2
Application-specific inference accelerator

Memory-augmented Neural Networks
+ Question Answering Accelerator on FPGA
(DATE-19, TVLSI-21)

Topic 3
Spiking Neural Networks

Improving Efficiency of Inference on Deep SNNs
-Burst coding and Time-to-first-spike coding
(DAC-19, DAC-20)

Publications