

Special Issue

Advances on Smart Vision Chips and Near-Sensor Inference for Edge AI

Message from the Guest Editors

The emergence of artificial vision is fueled by the convergence of advanced image sensing technologies and embedded artificial intelligence. In addition to the obvious requirements on image sensors—high spatial and temporal resolution, high dynamic range, 3D information—the challenge at the sensor plane is now the extraction of visually relevant information. However, conveying visual sensing and processing to the edge is very challenging. Convolutional neural networks, now at the core of most vision pipelines because of their high accuracy, come at the cost of a heavy computational load. Lightweight representations of the scene, abridged networks, and dedicated circuitry for inference acceleration need to be explored to accomplish efficient visual processing at the edge. For more information, please visit: mdpi.com/si/44545

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