

Invited Talk: Neuromorphic Computing

Principles, Achievements, and Potentials

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Neural networks have recently taken the field of machine learning by storm. Their success rests upon the availability of high performance computing hardware which allows to train very wide and deep networks. Traditional neural networks have very limited biological realism. Recent work on more brain-like hardware architectures has led to first large-scale implementations of neuromorphic computing systems. In the keynote, guiding design principles of neuromorphic machines, their application and performance as well as future plans are discussed.