

Cellularflow

– Machine Learning Circuits toward Brain Circuits –

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Abstract

NCN Brain Circuits Project report: Now is the age of neuromorphic computing that creates brain circuits. The analog and digital circuit theory changes because the values of the basic conductance elements can be made variable by learning. The structure of the computer changes to in-memory computing technology. In this report, we propose a gyrator neuron (GN) that enables analog computer operations. The GN is constructed based on memristor elements. The GN executes learning by back propagation processing and association by forward propagation processing.