

Two-Dimensional Oscillatory Neural Networks for Energy Efficient Neuromorphic Computing

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PRESS RELEASE

NeurONN

TWO-DIMENSIONAL OSCILLATORY NEURAL NETWORKS FOR ENERGY EFFICIENT NEUROMORPHIC COMPUTING



Thursday 6 February 2020

Two-dimensional oscillatory neural networks for energy efficient neuromorphic computing

The 4th and 5th of February 2020, in Montpellier (France), at the premises of LIRMM, CNRS the Kick-off meeting of NeurONN took place. All the Partners of the NeurONN Consortium met and set the ground for the activities along the three-year duration of the EU Project.

NeurONN[1] is a research project funded by H2020 EU's research and innovation programme with core subject "Energy-efficient bio-inspired devices accelerate route to brain-like computing". The project with duration of 36 months (1 January 2020 – 31 December 2022) brings together leading European research and academic institutions.

Neuro-inspired computing employs technologies that enable brain-inspired computing hardware for more efficient and adaptive intelligent systems. Mimicking the human brain and nervous system, these computing architectures are excellent candidates for solving complex and large-scale associative learning problems.

The EU-funded NeurONN project will showcase a novel and alternative neuromorphic computing paradigm based on energy-efficient devices and architectures. In the proposed neuro-inspired computing architecture, information will be encoded in the phase of coupled oscillating neurons or oscillatory neural networks (ONN).

The Consortium of six (6) partners is led by CNRS, the National Centre of Scientific Research (France). The project partners are IBM Research Zurich, Fraunhofer EMFT, CSIC/University of

[1] https://cordis.europa.eu/project/rcn/225607/en

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Seville, Silvaco, UK and AI Mergence, FR. Furthermore, NeurONN has initiated an Industrial Advisory Board which consists of members from Intel Corporation and Prophesee.



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