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## Neural sampling machine with stochastic synapse allows brain-like learning and inference

 S. Dutta, **G. Detorakis**, A. Khanna, B. Grisafe, E. Neftci, and S. Datta  
 2022  Nature Communications 13, 2571




## Randomized Self-Organizing Map

 N.P. Rougier and **G. Is. Detorakis**  
 2021  Neural Computation, 33(8)




## Stability analysis of a neural field self-organizing map

 **G. Detorakis**, A. Chaillet, and N.P. Rougier  
 2020  The Journal of Mathematical Neuroscience, 10 (20)




## GAIM: A C++ library for Genetic Algorithms and Island Models

 **G. Detorakis**, and A. Burton  
 2019  The Journal of Open Source Software, 4(44), 1839




## Inherent Weight Normalization in Stochastic Neural Networks

 **G. Detorakis**, S. Dutta, A. Khanna, B. Grisafe, S. Datta, and E. Neftci  
 2019  NeurIPS (NIPS) Conference, Vancouver (Canada)




## Contrastive Hebbian Learning with Random Feedback Weights

 **G. Detorakis**, T. Bartley, E. Neftci  
 2019  Neural Networks, 114




## Neural and Synaptic Array Transceiver: A Brain-Inspired Computing Framework for Embedded Learning

 **G. Detorakis**, S. Sheik, C. Augustine, S. Paul, B.U. Pedroni, N. Dutt, J. Krichmar, G. Cauwenberghs, E. Neftci  
 2018  Frontiers in Neuroscience (Neuromorphic section) 12




## Event-Driven Random Back-Propagation: Enabling Neuromorphic Deep Learning Machines

 E. Neftci, S. Paul, C. Augustine, **G. Detorakis**  
 2017  Frontiers in Neuroscience 11, 2017




## Incremental stability of spatiotemporal delayed dynamics and application to neural fields

 **G. Detorakis** and A. Chaillet  
 2017  Control and Decision Conference, Melbourne (Australia), 2017




## Event-Driven Random Backpropagation: Enabling Neuromorphic Deep Learning Machines

 E. Neftci, C. Augustine, S. Paul, **G. Detorakis**  
 2017  IEEE ISCAS, Baltimore (MD, USA)




## Closed-loop stimulation of a delayed neural fields model of parkinsonian STN-GPe network: a theoretical and computational study

 **G. Is. Detorakis**, A. Chaillet, S. Palfi, and S. Senova  
 2015  Frontiers in Neuroscience, 9:237




## Structure of Receptive Fields in a Computational Model of Area 3b of Primary Sensory Cortex

 **G. Is. Detorakis** and N.P. Rougier  
 2014  Frontiers in Computational Neuroscience, 8(76)

## A Neural Field Model of the Somatosensory Cortex: Formation, Maintenance and Reorganization of Ordered Topographic Maps

 **G. Is. Detorakis** and N.P. Rougier  
 2012  PLoS ONE 7(7): e40257

## Self-Organizing Dynamic Neural Fields

 N.P. Rougier and **G. Is. Detorakis**  
 2011  Advances in Cognitive Neurodynamics III, Hokaido (Japan)