



Data Science @ LHC 2015 9-13 November 2015

Lightning response Neuromorphic Hardware



Neural Net on Neuromorphic Chip

Transforming an artificial neural net into a spiking neuron network and implement in the hardware

"Fast-classifying, high-accuracy spiking deep networks through weight and threshold balancing"

http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=7280696&tag=1

Or

Train a spiking neuron network in the hardware



Neuromorphic Hardware in Practice

- How fast can the hardware be? Can it cope with high rate in the trigger
- How many channels can be processed in a chip
- When a Neuromorphic Processing Unit-NPU in your desktop?
- Setting up an openlab http://openlab.web.cern.ch/ partnership