Laurent Perrinet - Montreal AI and Neuroscience conference, December 13th, 2025 - Montréal, Québec

https://laurentperrinet.github.io/talk/2025-12-12-main/

A New Look for Convolutional Deep Networks

A New Look for Convolutional Deep Networks

Laurent Perrinet - Montreal AI and Neuroscience conference, December 13th, 2025 - Montréal, Québec

https://laurentperrinet.github.io/talk/2025-12-12-main/

Convolutional Neural Networks

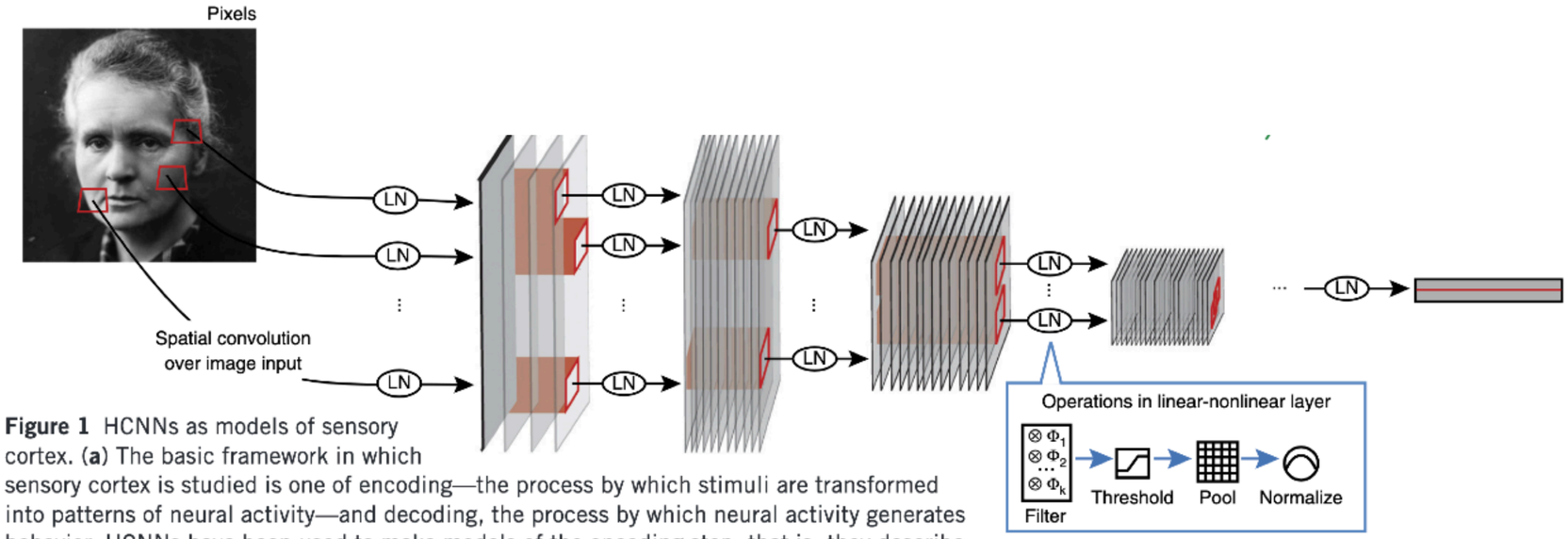

Figure 1 HCNNs as models of sensory cortex. (**a**) The basic framework in which sensory cortex is studied is one of encoding—the process by which stimuli are transformed into patterns of neural activity—and decoding, the process by which neural activity generates behavior. HCNNs have been used to make models of the encoding step; that is, they describe the mapping of stimuli to neural responses as measured in brain. (**b**) The ventral visual pathway is the most comprehensively studied sensory cascade.

Using goal-driven deep learning models to understand sensory cortex (2016) Daniel L K Yamins & James J DiCarlo