

Python on the Brain: A Quick Dive into NuPIC

Jeff Kramer (@jeffk)



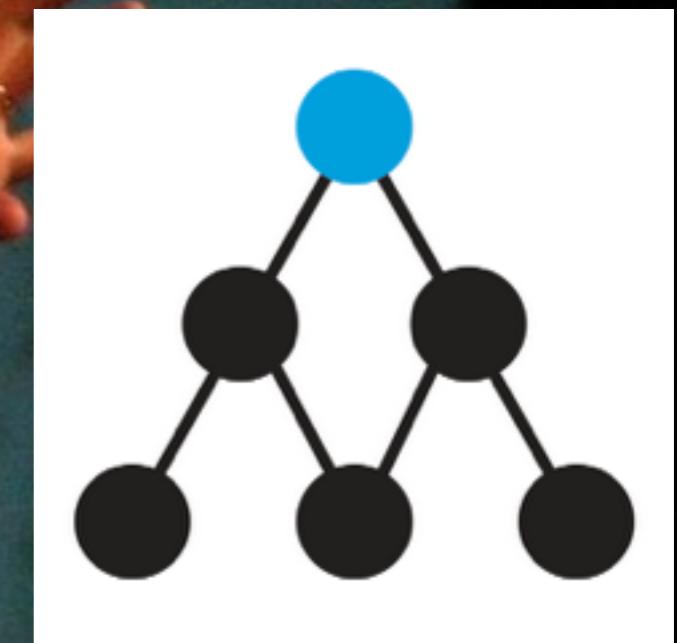
MACHINES THAT THINK

SIMULATION VS ABSTRACTION

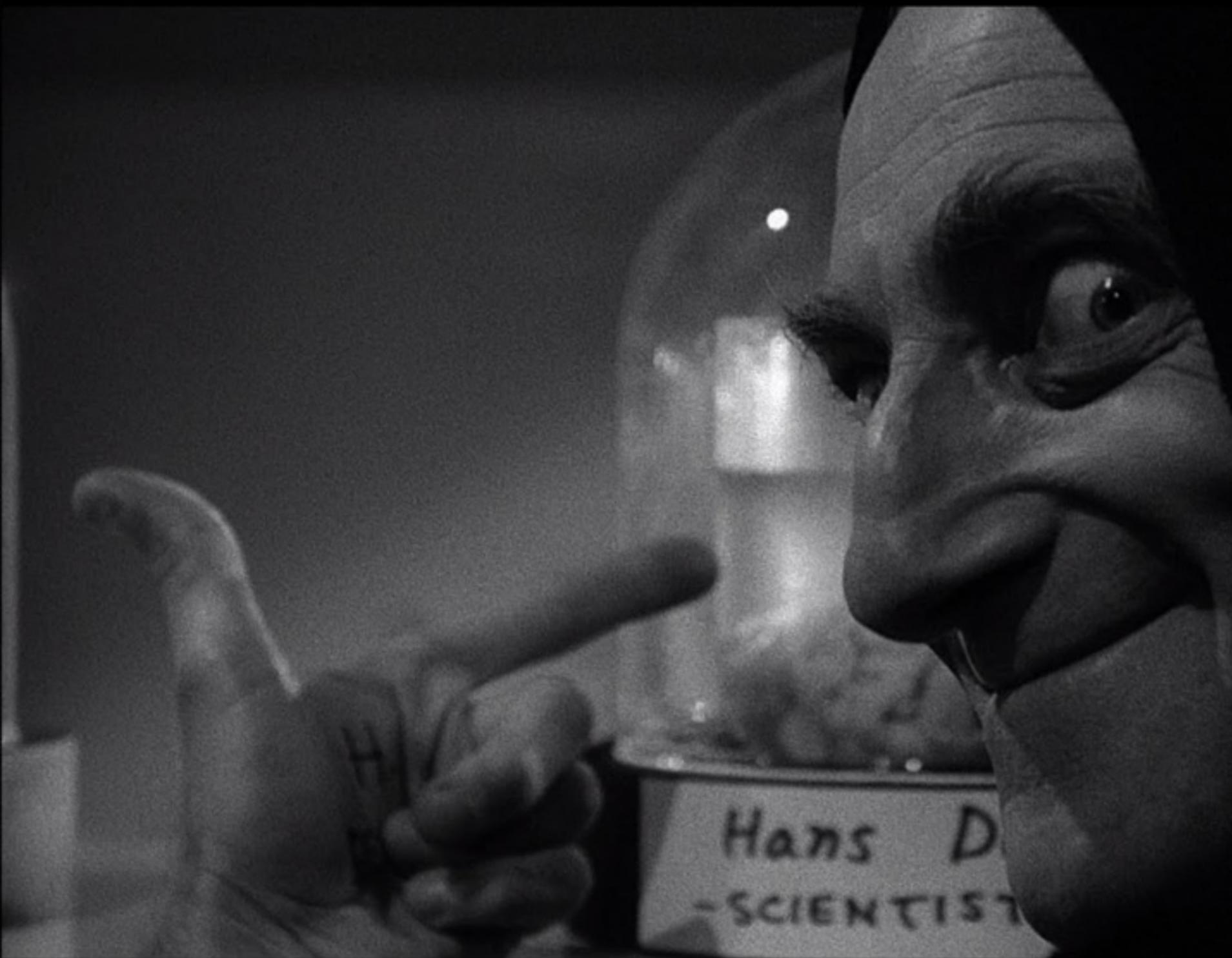


JEFF HAWKINS, NUMENTA & NUPIC

- Co-Founder: Palm & Handspring
- Author: On Intelligence
- Founder: Numenta
- Open sourced NuPIC at OSCON 2013



THE BRAIN & THE NEOCORTEX



PATTERN RECOGNITION & PREDICTION

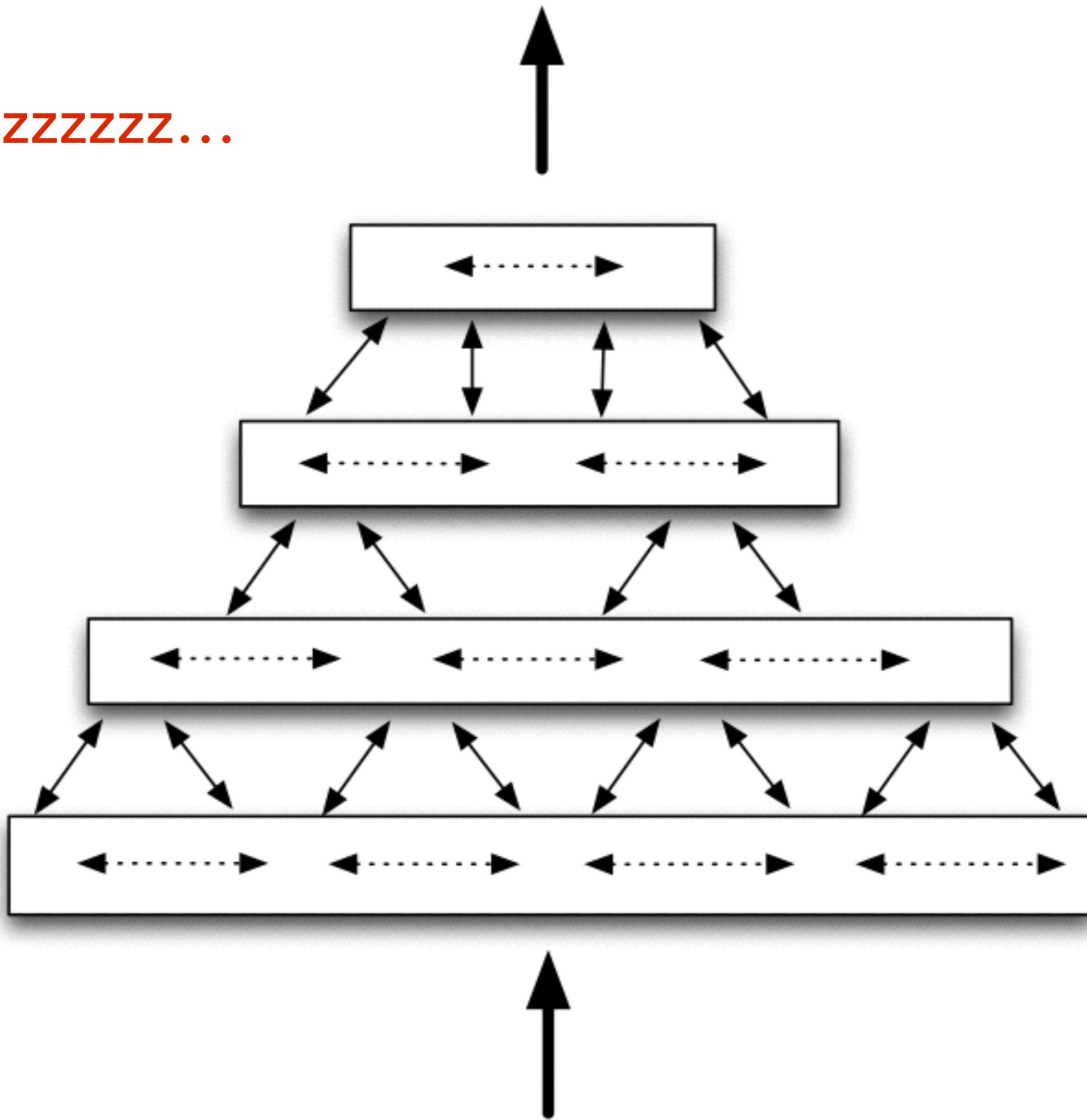
scenarios:

S P E C I A L W I R E D E D I T I O N

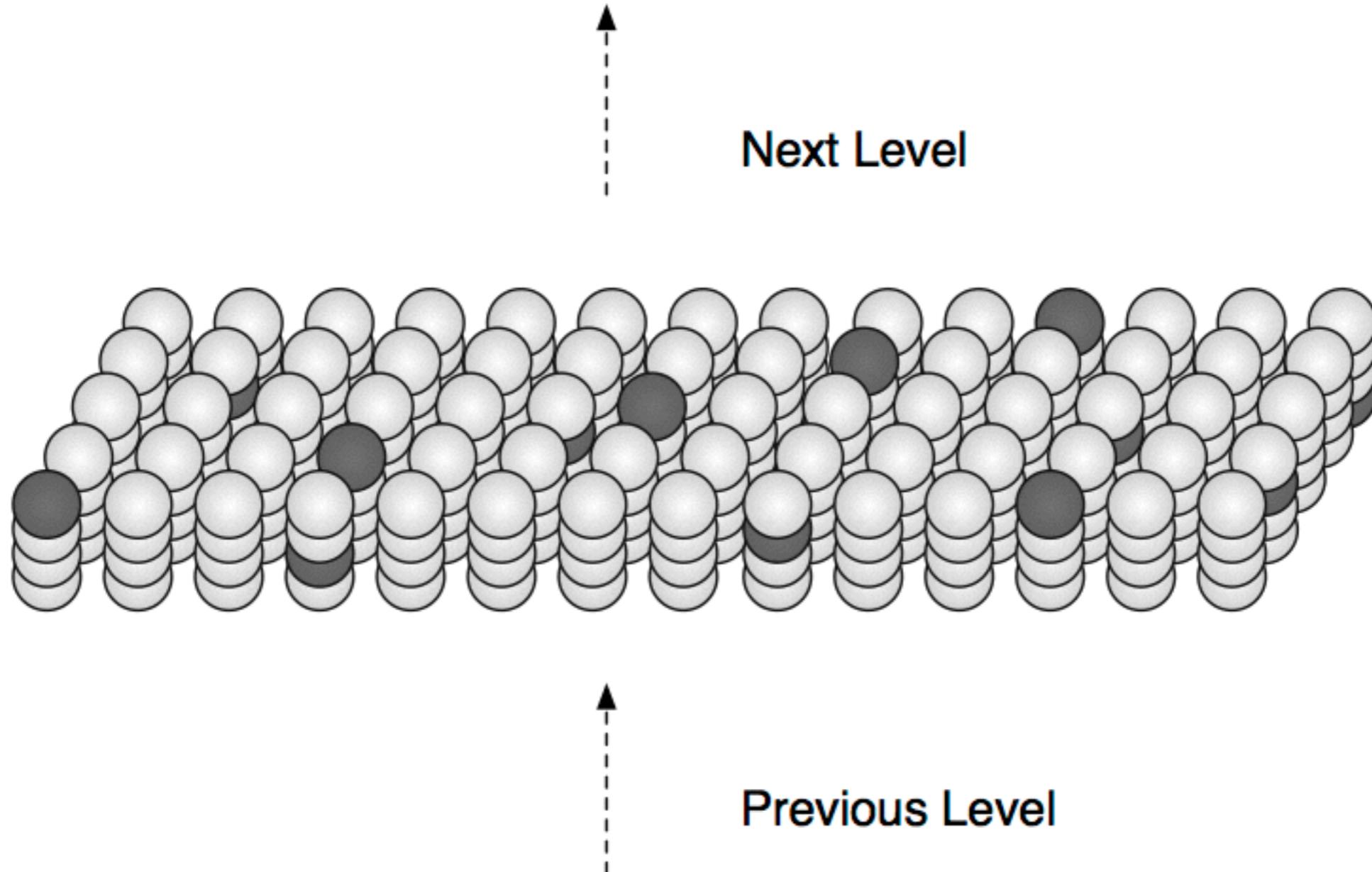


John Perry Barlow
Stewart Brand
Douglas Coupland
Danny Hillis
Charles Platt
Ed Regis

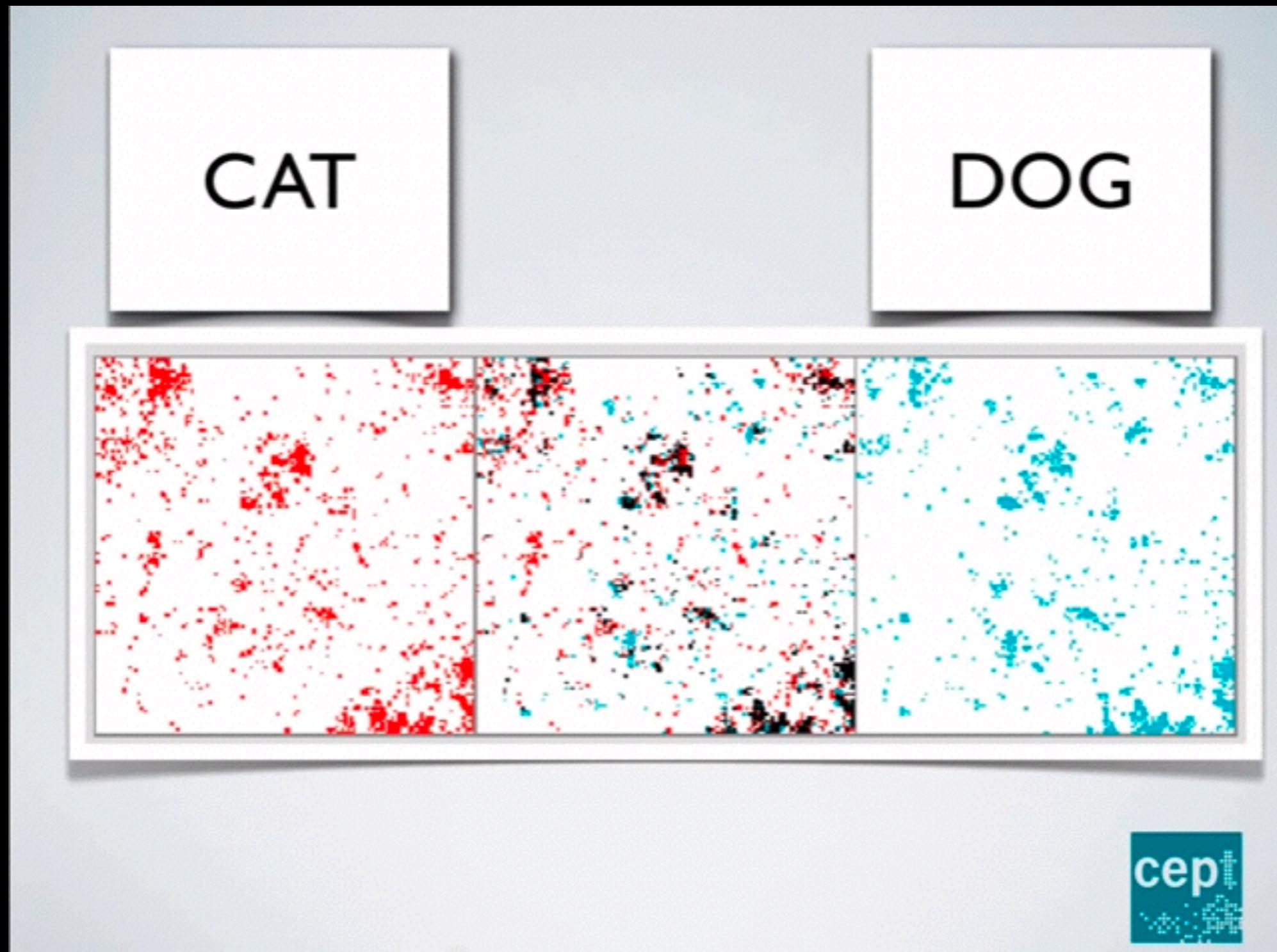
Layerzzzzz...



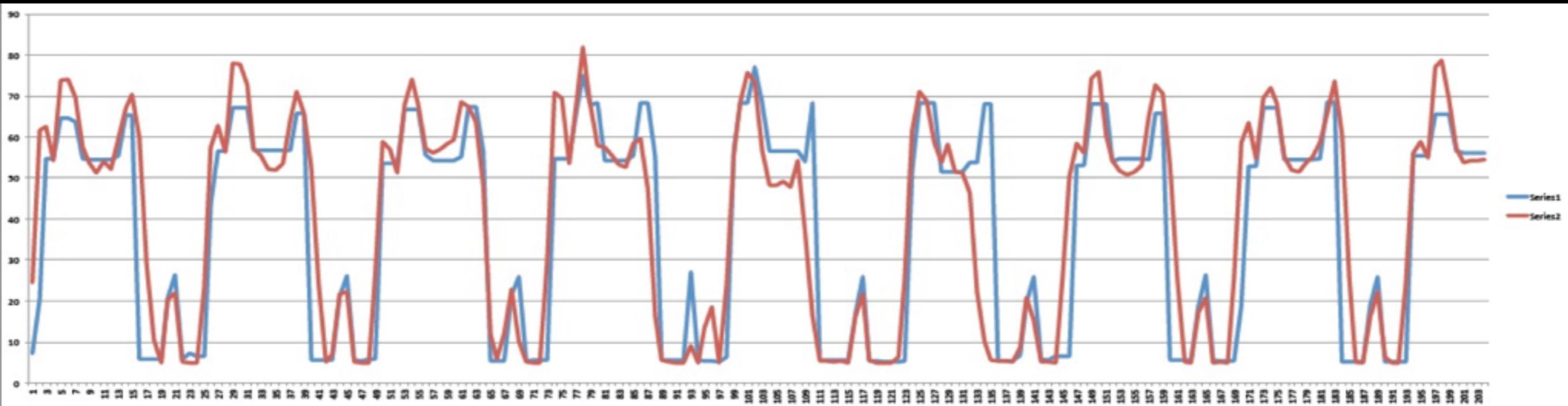
Neurons & Stuff



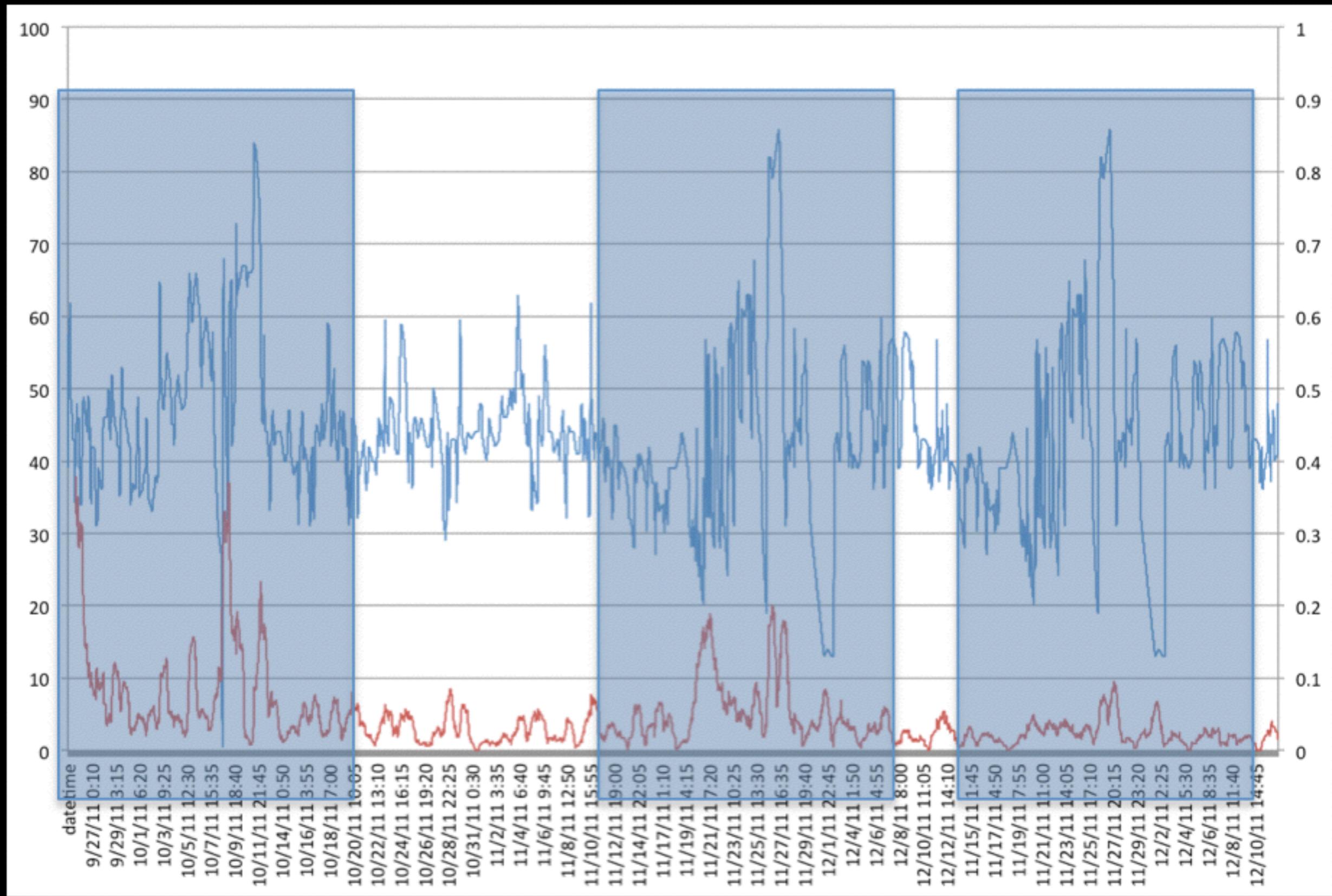
SPARSE DISTRIBUTED REPRESENTATIONS



DATA STREAM PREDICTION



ANOMALY DETECTION

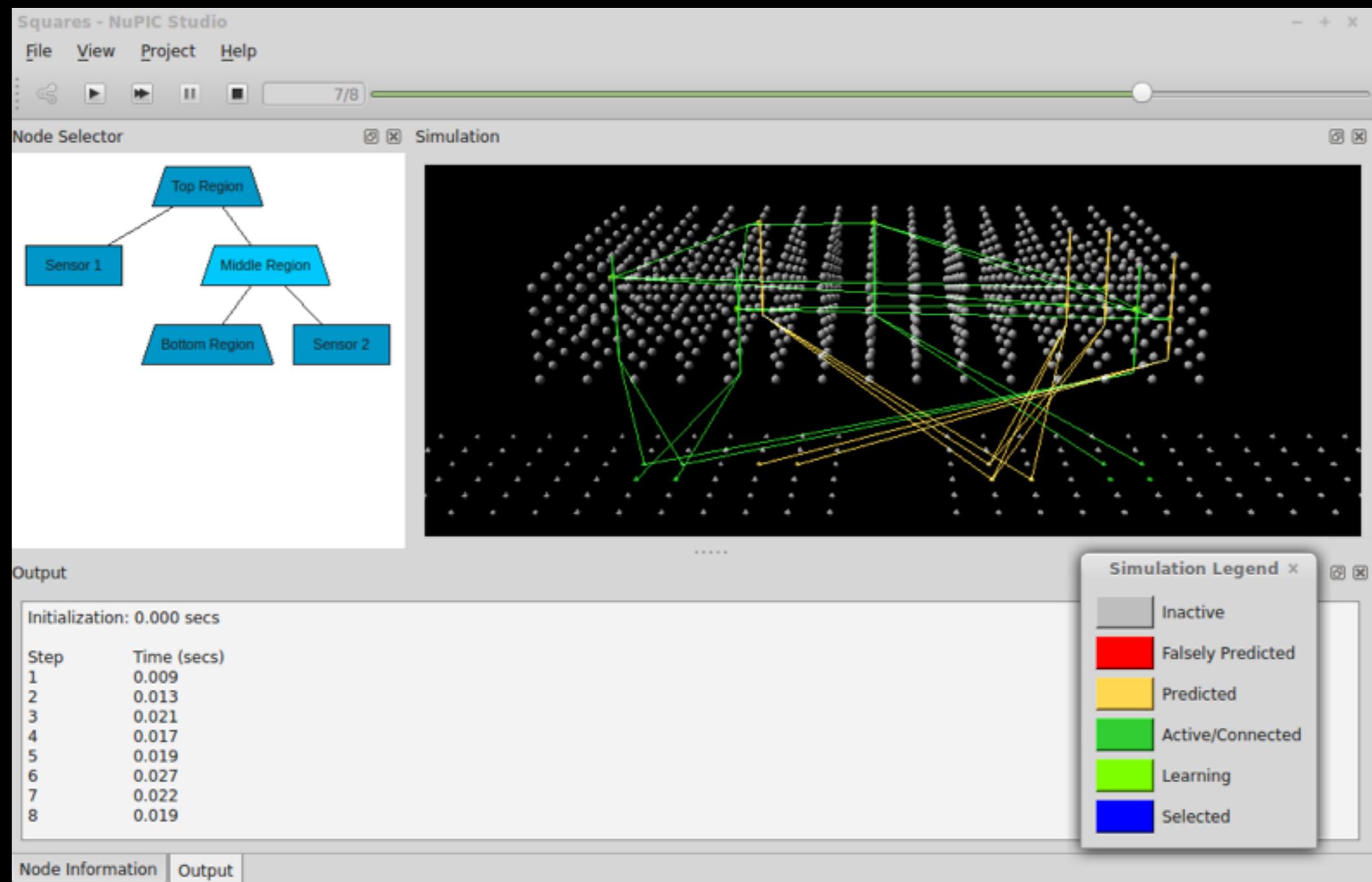


CODE & DEMO

RESOURCES

- NuPIC Email List
- Numenta Hackathons
- Jeff Hawkins Videos
- On Intelligence by Jeff Hawkins
- How to Create a Mind by Ray Kurzweil
- cortical.io
- DARPA SyNAPSE

RESOURCES - NUPIC STUDIO



Thanks!

github.com/jeffk/pytexas-nupic

Jeff Kramer (@jeffk)