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**From:** Joichi Ito [REDACTED]  
**Sent:** Saturday, August 8, 2015 11:30 PM  
**To:** Jeffrey Epstein  
**Subject:** Re: Jeff Hawkins

Roger.

On Aug 7, 2015, at 9:44 AM, jeffrey E. <jeevacation@gmail.com> wrote:

lets track him down. and talk to him no downside

On Fri, Aug 7, 2015 at 10:36 AM, Joichi Ito [REDACTED] wrote:

Sent from my iPhone

Begin forwarded message:

From: Joscha Bach [REDACTED]  
Date: August 7, 2015 at 03:22:34 PDT  
To: Joichi Ito [REDACTED]  
Cc: Iyad Rahwan [REDACTED], Karthik Dinakar [REDACTED], Ed Boyden [REDACTED]  
Subject: Re: Jeff Hawkins

Numenta is very timely, since they have been proposing a deep learning style architecture for quite some time. Their Hierarchical Temporal Learning network builds hierarchies of feature detectors (like everybody these days) and focuses on temporal distance learning. On the surface, the claims are similar to Schmidhuber's/Hochreiter's LSTM (but using fewer computational resources), and I would apply the same personal criticism: I do not think that the whole of the mind or brain can be explained using a single unifying principle, but perhaps perception and a lot of learning and representation (i.e. quite a bit of the neocortex and hippocampus) are.

I have not come across a comparative evaluation of HTM that would demonstrate its abilities and limitations when compared to the competition. Numenta is not academic, so it is understandable that they don't waste much time publishing, but it makes it hard for me to tell how far they have come. I have not seen a DeepMind style Big Demo of their stuff, and I could not get the open source version to work quickly enough when I tried. I have not talked to Jeff Hawkins yet.

What do the others think and know?

– J

<mail [REDACTED] Am 06.08.2015 um 15:30 schrieb Joichi Ito = [REDACTED]

Have you guys talked to Jeff =awkins?

Is his AI/brain stuff =nteresting?

- Joi

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Tips for mastering email overload - pls read - <http://hbswk.hbs.edu/archive/4438.html>

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