From: [redacted] on behalf of Ed Boyden <[redacted]>
Sent: Tuesday, July 22, 2014 2:55 PM
To: jeffrey E.
Subject: Re: my guess is biological hash functions exist

Sure... I guess I was thinking of this from a info theory standpoint, where if you can't recover the original, some info was discarded. But this is a tricky way to think. Best to stick to thinking about what one part of a network is computing, based upon what other parts of the networks will do with the signals received.

On Tue, Jul 22, 2014 at 10:51 AM, jeffrey E. <jeevacation@gmail.com> wrote:
> Not sure if discarding , as opposed to a function with a defined limit
> output .
>
> On Tuesday, July 22, 2014, Ed Boyden <[redacted]> wrote:
>>
>> Absolutely! Computation means discarding information (e.g., sensory
>> information being transformed into a decision requires discarding
>> some of the info -- a passive photocopier does no computation), and a
>> hash is basically doing that, but a one-way function, and towards
>> some fixed length. I think that is probably the way brains error
>> check, no?
>>
>> Best,
>> Ed
>>
>> On Tue, Jul 22, 2014 at 9:04 AM, jeffrey E. <jeevacation@gmail.com> wrote:
>> >
>> > https://www.khanacademy.org/economics-finance-domain/core-finance/m
>> > oney-and-banking/bitcoin/v/bitcoin-cryptographic-hash-function
>> >
>> > --
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>> --
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Ed Boyden, Ph. D.
Leader, Synthetic Neurobiology Group
Associate Professor, MIT Media Lab and McGovern Institute,
Departments of Biological Engineering and Brain and Cognitive Sciences Co-Director, MIT Center for Neurobiological Engineering New York Stem Cell Foundation-Robertson Investigator MIT, Room E15-421, 20 Ames St., Cambridge, MA 02139 email - esb@media.mit.edu office - (617) 324-3085 cell - (650) 468-5625 fax - (617) 253-6285 skype - eboyden3 web - http://syntheticneurobiology.org twitter - http://twitter.com/eboyden3 <?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
<key>conversation-id</key>
<integer>297250</integer>
<key>date-last-viewed</key>
<integer>0</integer>
<key>date-received</key>
<integer>1406040936</integer>
<key>flags</key>
<integer>8590195717</integer>
<key>gmail-label-ids</key>
<array>
<integer>6</integer>
<integer>2</integer>
</array>
<key>remote-id</key>
<string>425878</string>

```
</dict>
</plist>
```