
From: [REDACTED]
Sent: Saturday, March 22, 2014 3:21 PM
To: Jeffrey Epstein
Subject: Re: AI startup Vicarious secures \$40 million in investment funding

Hi,

Yeah, I understand that to secure substantial funding for my work, it will likely be necessary to make an impressive demo, and we're working on it.... When I have such a demo, I will let you know.

I think we should be able to come up with a nice "theory of mind" demo this year, using our AI game world as a basis. (The "deception agent" we discussed would be a part of this.) This may not be as headline-grabbing as solving CAPTCHAs but will form a much sounder basis for further work toward real AGI....

...

Indeed, perhaps Dileep made a wiser choice than me in terms of rapid securing of funding. I make no claim to be a genius of fundraising or scientific or tech-industry politics...

On the other hand, I believe my approach has led me to understand the problem better. I have always been driven more by understanding than by money; which is probably associated with why I have a lot more understanding than money ;-p

Dileep put a lot of resources on solving CAPTCHA, which was a very cool demo. In the course of doing this, he did not build his understanding of the broader AGI problem; but he created something that was broadly viewed as proving the validity of his approach, which enabled him to raise a lot of money...

Similarly, Demis Hassabis put a lot of resources on making a system that could learn to play simple video games using computer vision and reinforcement learning. This is basically a bunch of fiddling-around and tuning of known algorithms, which did not impress any of the world's reinforcement learning / vision experts particularly; but it did blow Larry Page away and got Demis a fat acquisition for Deep Mind. Good for Demis! ;)

I have worked on many aspects of the AGI problem at once, rather than focusing on pushing one corner of the solution to an impressively demo-able state; which has made it very slow for me to get to an impressive demo, but has enabled me to understand the problem in all its aspects pretty well...

Regarding Vicarious, though -- I'm sure you also understand that luck plays a large role in these things. Dileep was in the right place at the right time, and making use of this fact, he connected himself with the right people in the right way. Many others just as smart as him have put years of their lives into constructing wizzy demos, and have done so successfully, but have not gained much \$\$ or understanding in the process just due to contingent factors...

Bear in mind, more than 70,000 man-years of effort have gone into the Linux OS. Windows has taken millions of man-years of effort. These are just operating systems; not thinking machines. If OpenCog can be

created in a couple hundred man-years of effort all total, that will be remarkable efficiency compared to that with which operating systems or more commercial software programs have been built. And the fact that with a mere low-dozens of man-years of effort we have struggled to come up with an impressive demo shouldn't be a big shock. AGI is difficult. Of course it's easier to make a demo if you address an easier problem, like recognizing CAPTCHAs or playing Atari games, in a way that doesn't reflect a truly general architecture or approach...

:)
ben

-- Ben

On Sat, Mar 22, 2014 at 9:57 PM, Jeffrey Epstein <jeevacation@gmail.com> wrote:

> understood , the major difference between him and you was that he had a
> demo. I have been consistant that optimism needs to be coupled with
> demonstrations.

>
>
> On Sat, Mar 22, 2014 at 5:13 AM, Ben Goertzel <██████████> wrote:

>>
>> Hi,
>>
>> I guess you saw this news, right?
>>
>>

>> <http://venturebeat.com/2014/03/21/artificial-intelligence-startup-vicarious-grabs-40m-from-zuckerberg-musk-kutcher-others/>

>>
>> I know Dileep George (the founder of Vicarious Systems) a bit.
>> At my invitation, he spoke at our AGI-13 conference in Beijing.
>>
>> As Dileep told me then, the sole focus of his company is on visual
>> object recognition --- identifying what are the objects in a picture.
>> Once they crack that, they will move onto recognizing events in videos.
>> Once they crack that, they will move on to other aspects of
>> intelligence. Dileep, like his mentor Jeff Hawkins, believes that
>> perceptual data processing is the key to general intelligence... and
>> that vision is the paradigm case of human perceptual data
>> processing...

>>
>> Given Facebook's large trove of pictures and the nature of their
>> business, it seems they would have great value for software that can
>> effectively identify objects in pictures.

>>
>> Privately: I felt Dileep's overall understanding of AGI issues,
>> beyond perception processing, was pretty weak. Demis Hassabis
>> (founder of Deep Mind, recently purchased by Google for ~US\$500M),
>> always struck me as having a much broader, deeper view.

>>
>> Note that Facebook just made a big announcement about the success of
>> their face recognition software, which they saddled with the
>> perplexingly bad name "Deep Face": (a bit Linda Lovelace, no?)
>>
>>
>> <http://www.extremetech.com/extreme/178777-facebook-s-facial-recognition-software-is-now-as-accurate-as-the-human-brain-but-what-now>
>>
>> Actually DeepFace uses a standard, well known "textbook" AI algorithm
>> (convolutional neural nets), but they deployed it across a huge
>> amount of data, hence their unprecedented success...
>>
>>
>> -- Ben
>>
>>
>> --
>> Ben Goertzel, PhD
>> <http://goertzel.org>
>>
>> "In an insane world, the sane man must appear to be insane". -- Capt.
>> James T. Kirk
>>
>> "Emancipate yourself from mental slavery / None but ourselves can
>> free our minds" -- Robert Nesta Marley
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> *****
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Ben Goertzel, PhD
<http://goertzel.org>

"In an insane world, the sane man must appear to be insane". -- Capt.
James T. Kirk

"Emancipate yourself from mental slavery / None but ourselves can free our minds" -- Robert Nesta Marley <?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">

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