

GENETICS, PHILOSOPHY, SOFTWARE

A BETTER SEARCH ENGINE FOR SCIENCE?

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New [rumors say](#) about [Wolfram alpha](#)

In this respect it is vastly smarter than (and different from) Google. Google simply retrieves documents based on keyword searches. Google doesn't understand the question or the answer, and doesn't compute answers based on models of various fields of human knowledge.

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or those who are more scientifically inclined, Stephen showed me many interesting examples — for example, Wolfram Alpha was able to solve novel numeric sequencing problems, calculus problems, and could answer questions about the human genome too.

I have applied for a test account as I am interested in methods how to deal with genomic and all the other [pentabyte of data](#) — we urgently need a paradigm shift as single genome prices will [go down to 1000 €](#).

Computation is in many cases a better alternative to lookup. For example, you could solve math problems using lookup — that is what a multiplication table is after all. For a small multiplication table, lookup might even be almost as computationally inexpensive as computing the answers. But imagine trying to create a lookup table of all answers to all possible multiplication problems — an infinite multiplication table. That is a clear case where lookup is no longer a better option compared to computation.

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Maybe Wolfram Alpha could even do a better job of retrieving documents than Google, for certain kinds of questions — by first understanding what you really want, then computing the answer, and then giving you links to documents that related to the answer.

This may be a key point, as nobody probably scans all 1,000+ results pages in Google but

only the first 2 or 3, yea, yea.

Addendum

[More amazing facts](#) about the “New Kind of Science”

Wolfram sees his new program as being part of a history of mankind’s attempts to systematize knowledge. “We have the encyclopedists trying to write everything down. We have people like John Wilkins trying to create an analytical language for thought. We have philosophers and scientists hoping to find a universal theory of the world. But all these attempts founder on the vastness and the subdivisibility of the tasks.”

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