Playing with Google Scholar (Expanded Report)

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Disclaimer

The "author's" of this "paper", save the first, had no role in writing this paper. The first author, Robert Rand, takes all credit and accepts all responsibility for this work.

1 Introduction

This paper studies the working of *Google Scholar*, a product by the Google Company (Page et al., 1999). Google Scholar is well known as the source of scholarly articles on the World Wide Web (Berners-Lee, 1992) and as the authoritative publisher of the *h-index* and *i10-index*, the primaries indicators of an individual's worth as a human being.

Less known is how Google Scholar obtains all of its information. One hypothesis (the *Tex Eater Hypothesis*) is that Google crawls websites ending in ".edu" and searches for LaTeX formatted documents. Typesetting in LaTeX is known to be a sign of the highest level of academic rigor, per Watterson (Figure 1).

This paper aims to test that hypothesis by putting this document online at `http://www.cis.upenn.edu/~rrand/` in the hope that Google will find it. This domain is considered especially likely to be crawled by Google Scholar as it belongs to a prominent American research university noted for its age[1], its patron deity Benjamin Franklin, and the fact that its football team plays football[2] against Harvard[3].

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[1] $= age_{princeton} + 1$

[2] the author does not condone football

[3] or Harvard

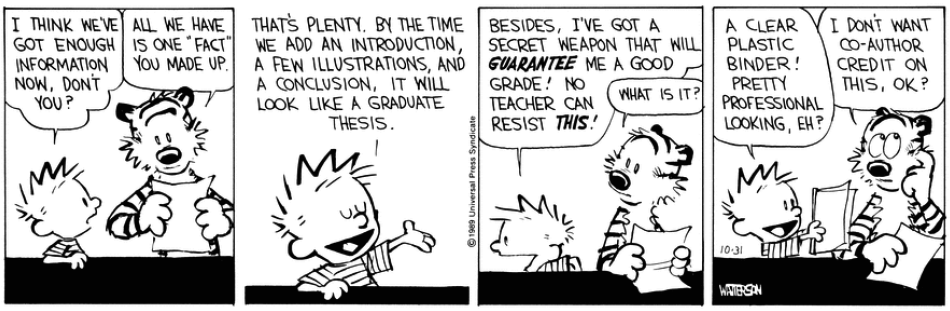

Figure 1: A convincing argument for the LaTeXtypesetting system.

We will report back with our results.

2 Cool Papers

The author thinks that the following papers and/or their authors are cool: Adaricheva et al. (2013); Rand and Zdancewic (2015); Boros and Rand; Paykin et al.; Pierce et al. (2014); McBride (2001); Green et al. (2013); Hritcu et al. (2013); Dénès et al. (2014); Adrian et al. (2015); Aaronson (2013); Barthe et al. (2014); Kripke (1972); Miller et al. (1991); Aydemir et al. (2005).

3 Results

"Playing with Google Scholar" was indexed by Google Scholar on April 30th, 2016, two weeks after it was posted (see Figure 2).

According to Alex Verstak of Google Scholar, "We had a laugh. colon, dash, open parenthesis." Stephanie Weirich of the University of Pennsylvania added "Bingo!"[4] Harley D. Eades III of Augusta University "tweeted" the following: "@pigworker You are the coauthor of a paper you didnt write: http://www.cis.upenn.edu/ rrand/playing.pdf It appears you are part of an experiment. colon, dash, capital-P." ("Pigworker" refers to Strathclyde University professor and co-author Conor McBride, who had no comment.)

[4] "A game of chance for two or more players, who mark off numbers on a grid as they are announced by the caller; the game is won by the first person to call out "bingo!" or "house!" after crossing off all numbers on the grid or in one line of the grid." (Wiktionary, 2016)

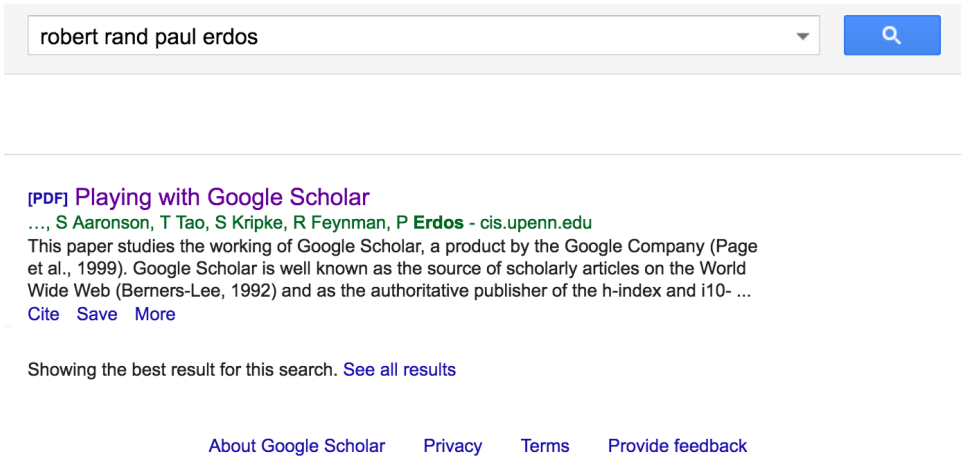

Figure 2: A Google Scholar search shortly after this article was posted.

The paper was removed from Google Scholar during the week of May 23rd, 2016.

3.1 Side Effects

All of the authors on this paper (save Paul Erdős) received Erdős numbers equal to 1, likewise all authors (save Feynman) received Feynman numbers of 1. Their coauthors had their Erdős and Feynman numbers updated to not-greater-than-2, and so forth for those authors' coauthors.

The effect on more complicated metrics, such as the Erdős-Bacon numbers, warrants further study.

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