

# aliasFree

an **alias-aware** search tool

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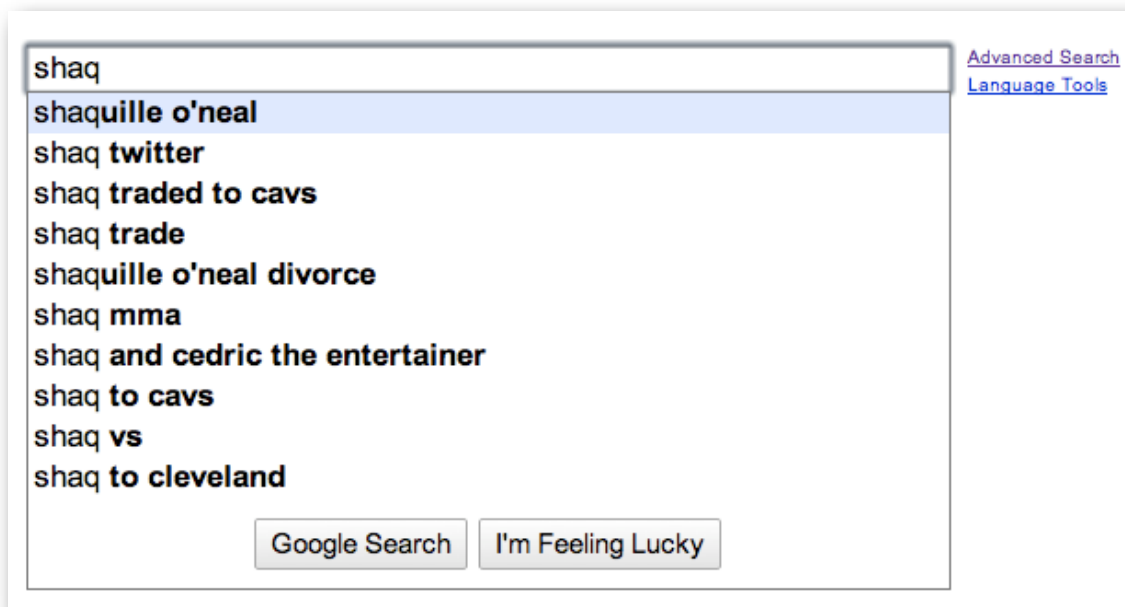
# aliasFree: an alias-aware search tool

## Project Concept

Cory Doctorow wrote against the idea that metadata will solve the search problem that people often can't find what they are seeking. He writes that metadata can't work because of many reasons: people are lazy, people lie, people are stupid, there is more than one way to describe something, etc.

We believe that relevant information exists that is categorized under a non-canonical name or in unfamiliar terms. In our project, we seek to address this problem.

Search engines provide operators and advanced search to help users broaden recall and increase precision. However, people rarely use these functions. In response, search engines suggest popular search terms and canonical descriptors. However,



these only reflect popular search terms and can not be combined for increased recall. Social media search on sites like Twitter is difficult because of the frequency of non-canonical names. We think that users of Twitter and Google could benefit from this functionality.

## Problem

The first problem we address is with search and synonymy. Synonyms are different word forms that describe the same thing or concept. We often don't get the most amount of recall because we don't use all possible search terms. For example: the recall for a search for "Beyonce" can be increased by adding terms like "Beyoncé" OR "Beyoncé Knowles" OR "Sasha Fierce" OR "Giselle Knowles". Since we are huge Beyoncé fans, we know all of her aliases but sometimes we don't bother to put them in.

This limits our recall. On the other hand, we may not always be such loyal fans of our favorite celebrities. Let's say we might not always know synonyms for our search queries. This limits our recall as well.

Once we have broadened our recall, we want to increase the precision of our search as well. We may only want to know about Beyoncé the film actor, and not Beyoncé the music artist. By forming a query to look like this: actor AND ("Beyoncé" OR "Beyoncé Knowles"), we can increase the precision of our search.

### **Project Description**

We designed a standalone page that gives users more relevant search results on Google and Twitter with little effort from the user. We increase the amount of results by including aliases from Freebase. We include domain types as well in order to narrow the results to a specific area of interest (music, actor, writer, award winner, politician, etc). Results are displayed dynamically through the Google AJAX Search API and the Twitter Search API.

When a user enters a query into the search field, names from the Freebase database are suggested to them. When the user mouses over the suggestions, a short description of the search term is displayed next to the search field. When the term is clicked. The full name is displayed in the search field. When the user submits their search term, aliases and domain types are displayed from Freebase. The user can select any number of aliases and only one domain to display search results from Google and Twitter. These results are displayed dynamically, as the user clicks through aliases and domains.

### **Challenges**

Domain usage isn't smart. We pull domain types from Freebase, but they don't always lead to good results. For example, the alias Shaq and the domain "basketball player" will not give us very good Twitter results because most people don't use domain terms in their 140 character message.

Aliases have different meanings. Paul Pierce's alias "The Truth", when included in search queries, dilutes search results with a large number of irrelevant responses that include the phrase "the truth" but not in reference to the basketball player, the NBA, or basketball in general.

# aliasFree



Paul Pierce

search

- Paul Pierce
- The Truth

- Search All
- basketball: basketball player
- sports: pro athlete

"Paul Pierce" OR "The Truth"  ×  
powered by Google™

▼ Web   

## [Do you have what it takes to be a tobacco](#)

American Legacy Foundation tobacco education campaign covers cigarettes, smoking , other tobacco products. "**The truth** about how the cigarette industry ...  
[www.thetruth.com](http://www.thetruth.com)

## [Paul Pierce - Wikipedia, the free encyclopedia](#)

"My name is Shaquille O'Neal and **Paul Pierce** is **the truth**. Quote me on that and don't take nothing out. I knew he could play, but I didn't know he could ...  
[en.wikipedia.org](http://en.wikipedia.org)

## [NBA.com : Paul Pierce Info Page](#)

Read about this player's career highlights, learn about his performance while playing in the NBA, and review his statistics.  
[www.nba.com](http://www.nba.com)

## [Paul Pierce | Official Website](#)

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[www.PaulPierce.net](http://www.PaulPierce.net). The nickname "**The Truth**" and **the Truth** Fund are not affiliated with the American Legacy Foundation.  
[www.paulpierce.net](http://www.paulpierce.net)

1 2 3 4 5 6 7 8 [More results »](#)

@janeyaustenfan Well, now the TRUTH HAS ITS BOOTS ON! Terry Pratchett nihiofkd (nhi) on 10/06/09 @ 12:20pm



@Stargates #3tr U have a strong need 2 speak hear the truth but u r sensitive 2 reactions of others. Choose friends who can really hear u. pandoraastro (Pandora Astrology) on 10/06/09 @ 12:20pm



<http://twitpic.com/klbq8> --- its only the truth...lol kingbos32 (Anthony Simmons) on 10/06/09 @ 12:20pm



RT @JAE\_MILLZ i think some people really just like being miserable.. thats really a sad situation!!! smfh--aint that the truth AirJAnthony (Kelvin Lindsey) on 10/06/09 @ 12:19pm



@MissKatiePrice i really hate haters whats the point. Your soo amazing. I carnt believe what they say about you i am 14 and i know the truth



NickCrompton (nicolas crompton) on 10/06/09 @ 12:19pm

Parallels between Egyptian God Horus 3000BC and Jesus Christ. Also called The Truth The Light <http://bit.ly/30Jn5A> scientifictruth (Dr. JSY) on 10/06/09 @ 12:19pm



@IamNinaBrown u feel me on that...she got ass like a mutha fugga @therealpinkyyyx is the truth with the booty...lol Tha\_Centop (Tha Centop) on 10/06/09 @ 12:19pm

