Pleasure and Competition in Collaborative Information Retrieval

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Collaborative IR: Opportunities

• Pleasure
• Competition

Latent in many IR settings. But collaborative systems bring these to the fore.

Current work: use these dynamics to improve IR in two senses:

• Better search results
• Better searchers
Search Off! A Game with Many Purposes

Please sign up and play.

N.B.
1) Sure to be many bugs... your mileage WILL vary.
2) Until official launch, games are likely to be deleted periodically.
3) While these data won’t be published, your searches will be publicly viewable.
### Search Off!

**Find games to play (by keyword)**

Search: ![Search](Search)

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### Games in Progress... top 5 of 5

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<tr>
<th>Recently Created</th>
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<th>Most Played</th>
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<td>cult leaders</td>
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### Help

Search Off is a game based on the idea that Web searching can be fun. Playing Search Off involves interacting creatively with a search engine (specifically, Search Off uses the BING search engine because the folks at Microsoft offer a very generous API).
Original query: cult leaders
Keywords: information about cult leaders, lists of famous ones or discussion of their personal qualities
Created at: Oct. 5, 2011, 10:45 a.m.

Target URL: http://www.allaboutcults.org/religious-cult-leaders-faq.htm
Target Title: Religious Cult Leaders - Cults - AllAboutCults.org

Total searches so far in this game: 84
Average score: 13.65
Max score: 53.16

Results for: "cult leaders" members

Score: 4.80  Rank of target: 1  Number fresh: 3.0

1. Religious Cult Leaders - Cults - AllAboutCults.org
   Religious Cult Leaders - Are there certain characteristics that make cult leader successful? What draws people to them and why do people stay active in a cult?

2. Beyond Mind Control - Learn the Communication Methods of Cult Leaders
   This Amazing Course Shows You How To Model Their Techniques - And How To Make Them Your Own!

3. Most Evil Cult Leaders 1/5 - YouTube
   What qualifies you to be a cult leader, what do you need to have, the gift of gab, charisma. Look at this and find out if you have these qualities.
Search Off!

Original query: cult leaders
Keywords: information about cult leaders, lists of famous ones or discussion of their personal qualities
Created at: Oct. 5, 2011, 10:45 a.m.

Target URL: http://www.allaboutcults.org/religious-cult-leaders-faq.htm
Target Title: Religious Cult Leaders - Cults - AllAboutCults.org

play this game

So Far: 84 queries & 7066 unique documents.

- (53.16) "religious cult" leaders charismatic fillmore bab
- (50.49) cult leaders ballard
- (49.51) cult leaders fillmore
- (48.68) bab ballard fillmore smith religious cult leaders
- (46.81) cult leaders bab
- (45.40) Charles Fillmore (1854-1948) is credited with founding the Unity School of Christianity
- (35.94) Allaboutcults.org Religious Leaders
- (30.33) "cult leaders" AND religion AND faq
- (30.14) "religious cult leaders" faq
- (27.47) "Famous cult leaders"
- (26.90) allaboutcults religious cult leaders
- (26.45) "cult leaders" excommunicated
- (25.70) "cult leaders" religious faq
- (25.40) "cult leaders" worship claimed

- (1155.13) Religious Cult Leaders - Cults - AllAboutCults.org
- (688.03) Religious Cult Leaders - Top 10 - Internet's definitive top list...
- (223.62) Violence Tolerance 04
- (198.89) Cult - Wikipedia, the free encyclopedia
- (181.30) RELIGIOUS GROUPS & CULTS - TRUTH ON THE NET
- (179.91) The Cult Test, Question 0 - Orange Papers
- (177.99) Cults & False Teachings | Cults List - SO4J-TV | Christian TV...
- (169.56) UNDERSTANDING CULTS
- (163.73) cult leaders
- (160.13) Ahmed Hulusi - Wikipedia, the free encyclopedia
- (152.51) Cults - All About GOD - GOD - AllAboutGOD.com
- (151.76) RELIGIOUS REQUIREMENTS
- (148.43) L.A.'s Five Most Powerful Cult Leaders
- (145.81) Cults - Bible Truths, Salvation, Creation, Angels, Jesus, Cod...
- (144.95) Texas governor (Rick Perry) denies Event includes cult
Search Off! A Game with Many Purposes

• A game begins with a seed query.
• Game play builds:
  – A ranked list of documents.
  – A ranked list of queries.

• Query scoring is key to Search Off’s motivation and design
A Plausible Query Scoring Function

For a game $G$ that has been played $t$ times so far, yielding a set of $S$ “seen” documents.

A new query $Q$ returns a SERP $R$ with a total of $N$ documents.

$R$ ranks the target at position $p$.

$$\phi(Q, G) = t \cdot \frac{N - p}{N} \cdot \frac{|R \notin S|}{N}$$
Crucial Research Questions (Help, Please!)

• Is it plausible that this would be fun enough for critical buy-in?
• What *is* critical buy in?
• Are the proposed benefits plausible/non-trivial?
  – Improved search results (for what kind of needs?)
  – More skillful searchers
• Scoring function:
  – Transparency vs. ease of cheating
  – What kinds of cheating are actually undesirable?
  – Does the scoring function need additional criteria?
• How to evaluate a system like Search Off?