Incongruity Algorithm Predicts Interestingness (20140083, Dr. Jaideep Srivastava)

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Improves Search Algorithm

An algorithm has been designed to maximize clicks in a search engine result page. It measures the incongruity of a given text segment (i.e. how unrelated and rare the terms are within the segment). In the utility of a search algorithm, the method utilizes a user's cookies and browser history to further refine its prediction of what the user will find interesting based on search terms. It then sorts search results in order of most incongruous to least incongruous and displays results. This search engine optimization (SEO) technique was found successful in the tested environment of Wikipedia's searching system, where the user was modeled as an interested web surfer.

Recommender Systems

Another high-functioning application of this technology is in recommender systems. Recommendations based on current article viewing, music session, etc. are critical to keeping viewers on a site. "Interesting" recommendations help increase the length of a visit and the number of clicks. An additional application of this algorithm is to set a "creativity measurement" by which copy advertisers and text artists can gauge the interestingness of their pieces.

Incongruity Increases Interestingness

It has been well-proven in the fields of psychology and neuroscience that there is a deep correlation between conceptual incongruity and human interest. Essentially, things that don't fit their environment are interesting (i.e. a clown in a business meeting). In the world of search engines, one of the most fundamental goals is to have visitors click on a site link. Often times this click will result in a converted purchase for the site owner, and more often it means cost-per-click advertising revenue for the search engine. Because users will only click on a link that

catches their interest, there is huge pressure in the world of e-commerce and advertising to optimize a search environment and in-site recommendations for what is appropriately known as "interestingness".

BENEFITS AND FEATURES OF SEMANTIC INCONGRUITY ALGORITHM:

- Maximizes clicks and visitor engagement in an online search environment
- Utilizes cookies and web browser history to predict user interest more accurately
- Measures the interestingness of any provided body of text for a particular viewer

Phase of Development Alpha software developed

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