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Building an Efficient Database Driven Reverse Mapping Dictionary

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Abstract: With the enormous availability of words in usage it is always being a challenge to find the meaning. Even the versatile speaker may thrash about finding a meaning for certain unheard words. In such cases they need some source for reference likeLexicon. In traditional model for using dictionary, forward concept is implemented where it result in set of definition and it may produce a comprehensive phases. This may even confuse the user with the different concept of understanding or sometimes user could not understand the detailed concept. To overcome this concept, we facilitate reverse dictionary in which for any phases or word, the appropriate single word meaning is given. This system also facilitates to provide the relevant meaning even if that word is not available in the database. It will also produce instant output for the user input.

Index -Term: Phrase, Lexicon, Database.

INTRODUCTION I.

understand. Datamining is a concept in which the detailed indexing (LSI) and principal component analysis (PCA), and in depth information is analyzed and extract the both analyze the keywords of documents in anaggregate to information from the data set. Data mining is a run- identify the dominant concepts in the document. throughof spontaneouslysearching large stores of data to Consequently these dominant concepts are represented as discover pattern and trends that go beyond simple analysis. vectors in the keyword space and are used as the basis of Data mining uses sophisticated mathematical algorithm to similarity segment the data evaluate the probability of future events. implementations of Concept Similarity Problem (CSP) Data mining is alsocalled as knowledge discovery in data (KDD). The data is extracted from database. Data ware house support this concept by implementing multiple Drawbacks database. It is a central respotiary of data which is created by \geq integrating data from one or more disparate sources. Data that exactly match a dictionary definition; warehouse stores up-to-date data as well as ancient data and \geq are used for generating a new trending reports for senior management report.

П. EXISTING SYSTEM

In the fact that it is more significant to make a reference for unheard word, user prefers a source like Report the formation of the WordStar Reverse Dictionary dictionary for better understanding. The performance allows online interaction with users Current semantic correspondence measurement schemes that are highly computationally rigorous. In this technique, concepts are order of magnitude performance and scale improvement represented as vectors in a keyword space. The two most

It is important that the detailed study and concept is always common methods to accomplish this, latent semantic comparison for classification. In most solutions, vectorization is done a priori, and at runtime, only vector distances are computed.

It requires the user's input phrase to contain words

It does not scale well-for a dictionary containing more than 100,000 defined words, where each word may have multiple definitions; it would require potentially hundreds of thousands of queries to return a result.

III. **PROPOSED SYSTEM**

(WRD), a scalable-driven RD system that attempts to address the core issues identified above. The WRD not only fulfills new functional ideassketched above, it does so at an over the greatest concept similarity measurement structures



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the WRD is distantenhanced in solution quality than the two gathering information. From the gathering information salable RDs available. Our reverse dictionary system is based on the concept that a phrase that conceptually defines a word should bear a resemblance to the word's genuine definition, if not matching the exact disputes, then at least conceptually similar. Consider, for example, the following concept phrase: "the tower is made of steel girders crisscrossed to make it stronger". Based on such a phrase, a reverse dictionary should return words such as "mercerize, iron work, and shove". In our RD, a user might input aphraserefer toan unknown term of concern. Since an input phrase might hypothetically satisfy the definition of manifoldwords, a RD should return a set of potential matches from which a user may select his/her optimal of terms. This isdense, however, because the user is suspectto enter a definition that exactly accordsone found in a lexicon. The significance of the phrase the user entered should be conceptually similar enough to a genuine dictionary definition to generate a set of possible matches.

Advantages

It does so at an order of magnitude performance

 \triangleright Scale improvement over the best concept similarity measurement schemes available without impacting solution quality

IV.FUTURE ENHANCEMENT

K-means clustering additionally Lamstar Network:

The course of action follows a simple way to organize a given dataset through a definite number of clusters (assume k clusters) fixed a priority. The main thought is to define k centroids, each cluster. Centroids should have a ability to achieve a result from different location. So, centroids are placed far away from one after another. The next step is to take each point belonging to a given data set and connect it to the nearest centroid. When no point is right through, the first step is fulfilled and an early groupage is done. The centroid's position is recalculated consistently until cluster have to add all components this want to be continues till all the components are cluster into the final necessary number of clusters. After this we have k new centroids, a new fastening has to be done among the same data set and the closest centroids. A loop has been produced. Result of this loop want to be notice that the k centroids change their position step by step until no more changes are done.

V.DATAFLOW DIAGRAM

The input is given by the user in the form of phrase in search box. Stopping words are those that are pre-defined by the developers. The input phrase id entered into stopping phrase in this conjunction, preposition, negative word are removed. The remaining phrase is moved to the mangus word. The

available without impacting key quality. We also reveal that mangus word stores the important words and pass it to the



the words are sent to the five databases simultaneously. Five database such as synonym db which give the relevant meaning for that important word, rms db creates the parse tree for that dictionary definition, hyponym db a word that is more specific than a given word / hypernym db a word that is more generic than a given input word, antonym db which gives opposite answer to given word, definitions db is describing the word briefly .the output from five database is again send to gathering information it follow some raking algorithm in which the words search first in database is displayed first.

VI.CONCLUSION

In this paper, we describe the significant challenges inherent in building a reverse dictionary, and map the problem to the well-known conceptual similarity problem. We propose a set of methods for building and querying a reverse dictionary, and describe a set of experiments that show the quality of our results, as well as the runtime performance under load. Our experimental results show that our approach can provide significant improvements in performance scale without sacrificing solution quality. Our experiments comparing the quality of our approach to that of Dictionary.com and OneLook.com reverse dictionaries show that the Wordster approach can provide significantly higher quality over either of the other currently available implementations

REFERENCES

- [1] R. Baeza-Yates and B. Ribeiro-Neto, Modern Information Retrieval. ACM Press, 2011.
- [2] D.M. Blei, A.Y. Ng, and M.I. Jordan, "Latent Dirichlet Allocation," J. Machine Learning Research, vol. 3, pp. 993-1022, Mar. 2003.
- J. Carlberger, H. Dalianis, M. Hassel, and O. Knutsson, "Improving [3] Precision in Information Retrieval for Swedish Using Stemming,



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Technical Report IPLab-194, TRITA-NA-P0116, Interaction and Presentation Laboratory, Royal Inst. of Technology and Stockholm Univ., Aug. 2001.

- [4] H. Cui, R. Sun, K. Li, M.-Y.Kan, and T.-S. Chua, "Question Answering Passage Retrieval Using Dependency Relations," Proc. 28th Ann. Int'l ACM SIGIR Conf. Research and Development in Information Retrieval, pp. 400-407, 2005.
- [5] T. Dao and T. Simpson, "Measuring Similarity between Sentences," http://opensvn.csie.org/WordNetDotNet/trunk/Projects/Thanh/Paper/W ordNetDotNet_Semantic_Similarity.pdf (last accessed 16 Oct. 2009), 2009.

[6]Dictionary.com, LLC, "Reverse Dictionary,"http://dictionary.reference.com/reverse, 2009.

- [7] J. Earley, "An Efficient Context-Free Parsing Algorithm," Comm.
- ACM, vol. 13, no. 2, pp. 94-102, 1970.
 [8] Forrester Consulting, "Ecommerce Web Site Performance Today," http://www.akamai.com/2seconds, Aug. 2009.
- [9] E. Gabrilovich and S. Markovitch, "Wikipedia-Based Semantic Interpretation for Natural Language Processing," J. Artificial Intelligence Research, vol. 34, no. 1, pp. 443-498, 2009.
- [10] V. Hatzivassiloglou, J. Klavans, and E. Eskin, "Detecting Text Similarity over Short Passages: Exploring Linguistic Feature Combinations Via Machine Learning," Proc. Joint SIGDAT Conf. Empirical Methods in Natural Language Processing and Very Large Corpora, pp. 203-212, June 1999.