

Facsimile Categorization and Juncture Ratio for Web Portal

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Abstract— Nowadays it is difficult to get the exact image data that we need. The main objective of this project is to provide the exact image data to the user which is achieved by creating a web portal. With the help of Multi-view concept Learning (MCL) algorithm image data is categorized efficiently. The data thus retrieved is displayed to the user based on the inputs given by the user. The user can search specific image data in a strategic way that is being categorized by the MCL algorithm. Downloading the images is also of higher resolution to avoid pixel breaking which is predominant in this system.

Key words: Frequent Pattern Mining, High Utility Itemset Mining, Transaction Database

I. INTRODUCTION

Due to the increasing availability of Smartphone's and the growing Internet penetration over the world, web mapping services (Google Maps, Yahoo! Maps, MapQuest) are now dealing with rapidly arriving queries, that are issued by a large amount of desktop and mobile users. In this we focus on a typical algorithm called the Multi-view Concept Learning, a novel non-negative latent representation learning algorithm for capturing conceptual factors from multi-view data. For example "Generally People follow their own tastes for some kinds of interests (e.g. Clothes)", Multi-view Concept Learning tried to learn a conceptual latent space of items by exploiting both multiple views of items and partial label information.

In order to capture the flexible conceptual patterns in multi-view data, the learned latent space ought to not only preserve the semantic relationships between data Items, but also allow each latent factor to be associated with a subset of views. We develop a block coordinate descent method to solve the optimization problem of Multi-view Concept Learning algorithm.

The semantic relationship between the items can be captured by the learned latent space through the partial label information by a graph embedding framework. Each dimension of the learned latent space has the flexibility of being associated with an arbitrary subset of views.

The optimization of graph matrices is based on the recently proposed composite gradient mapping technique. Seven low level features were extracted for each image. We develop an optimization method for Multi-view Concept Learning which optimizes the objective function with respect to the basis matrices and the consensus encoding matrix alternatively. Our Multi-view Concept Learning algorithm is different from other methods from two aspects: 1) this algorithm directly penalizes the distances between labeled items in the latent space. 2) Also employs sparseness constraints to learn flexible latent factors.

In the flexibility of uses the interface has been developed a graphic concept in mind, associated through a browser interface. The GUI's at the top level has been categorized as follows (i) Administrative User Interface Design (ii) The Operational and Generic User Interface

Design. The administrative user interface concentrates on the consistent information that is practical, part of the organizational activities and which needs proper authentication for the data collection. The Interface helps the administration with all the transitional states like data insertion, data deletion, and data updating along with executive data search capabilities. The operational and generic user interface helps the users upon the system in transactions through the existing data and required services. The operational user interface also helps the ordinary users in managing their own information helps the ordinary users in managing their own information in a customized manner as per the assisted flexibilities.

A. Multi-View Learning

An approach to machine learning that learns a problem together with other related problems at the same time using a shared representation. Therefore multi-view learning is a kind of inductive transfer.

B. Non-Negative Matrix Factorization

It is a multiplicative analysis and linear algebra where a matrix V is factorized into (usually) two matrices W and H , with the property that all the three matrices have no negative elements. This non-negativity makes the resulting matrices easier to inspect.

C. Graph Embedding

An embedding of a graph into a surface is a drawing of the graph on the surface in such a way that its edges may intersect only at their endpoints.

D. Structured Sparsity

The geometric properties (e.g. shape, location) of the group are relatively stable. By adding structured sparseness constraints on the basis matrices to allow a latent dimension to be associated with a subset of views. Imposing such structured sparseness constraints, some latent dimension would be explained by subsets of views rather than by all the views.

II. MULTI-VIEW CONCEPT LEARNING ALGORITHM

The working of Multi-view concept learning algorithm is explained as follows. From the set of items, we first obtain various features to construct the set of data matrices. Data matrices are then factorized into basis matrices and the consensus encoding matrix. The next step is presenting a framework for discovering all closed gatherings from a trajectory database. After this step it performs a density based clustering on the trajectory of objects and it should be maintained for each point of time. To do so, two types of algorithms is used (i) Indexing cluster with R-tree by using density based clusters the output may have arbitrary sleep and the R-tree maintains each point. (ii) Indexing cluster with grid based clusters help us more efficiently in effective pruning process.

III. EXISTING SYSTEM

In the existing system, image is not searched concurrently which makes the user to search the image from the list and it is time consuming. Time efficacy is less while you search the image from a large database. No categorization is done at the starting stage. Sorting is not used in mining the data which makes the user to view large amount of data. The converging speed was faster on text data than on image data.

IV. DISADVANTAGES

The disadvantages of the existing system are explained as follows. Images could not be downloaded in a variety of pixels. No categorization is done in data mining. It is not possible to get HD images every time. User will not get the sorted images at the starting stage. Images are retrieved from database but it takes more time to reload the page.

V. PROPOSED SYSTEM

The main objective of this paper is to have an advanced search where the images are mined from a large quantity of database and give the results to the user based on the input given. Images are searched and the categorization is given dynamically to the user to select the item that is to be displayed as output in the next page. Each and every image is of high resolution which gives a better look to it. User can also search images which are excluded from the categorization and download it with high pixel ratio. General idea is that same category to be close to each other while keep belonging to different categories far away from each other which is being displayed in the web page.

VI. SYSTEM ARCHITECTURE

The user before login to the web site they must register. After registering the user can login to the web site and can view the required images which have been searched based on the input given by the user. The images displayed are categorized initially and helps the user to choose the desired image. The image data which is being displayed to the user is retrieved from the database and shown. User can download the desired images at different pixels. Administrator maintains the database of the user. Administrator can view the downloaded images and has the permission to upload the new images to the database based on the user queries. Image data storage and retrieval is performed by accessing the database

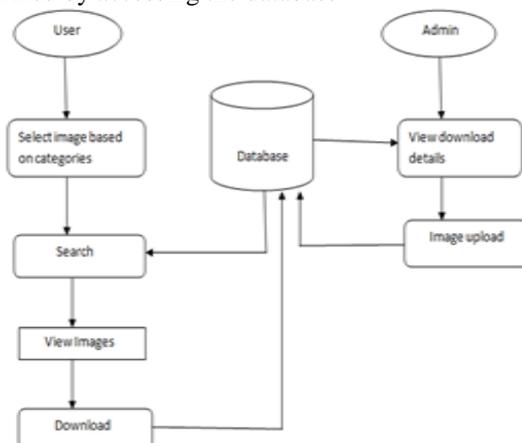


Fig. 1: Architecture

VII. MODULES

A. Administrative UI Module

In this module, the administrative side of the system will be designed and developed. The administrative user interface has been deployed. Administrator login will be authenticated.

B. Aesop Engine Analysis Module

In this module, Aesop engine analysis has been developed by the following basis through knowledge Monitoring, Knowledge base analysis is performed on data. And in semantic analysis, Snapshot bucket analysis is performed.

C. Optimized Planning and Execution Module

In optimized planning module, a temporary reasoned model is created and in this apply throttle to contain the meta-data, global knowledge, and a set of recent snapshot buckets that cover a configurable look-back interval.

D. User UI Module

In this module, the user interface will be designed and developed. The user side login will be authenticated and session is maintained. User registration must be needed in this module.

E. User File Handling Module

In this module, user can upload and delete the files, which is user wants to share. User can report the administrative side based on the file queries.

F. User File Retrieve Module

In this module, the user can download the files which have been uploaded by themselves and other users.

VIII. ADVANTAGES

Image search is filtered at the starting stage. Download with variety of pixels. Multiplicative Update Algorithm is used to fetch the data from database using data mining. High Resolution images are provided. Sorting is used in data mining to be specific with your item.

IX. CONCLUSION

In future, data is being mined from the database automatically based on the frequently searched items and also by getting the user location which is very much required for the today's world.

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REFERENCES

- [1] S. Romberg, R. Lienhart, and E. Horster, "Multimodal image retrieval," *Int. J. Multimedia Inf. Retrieval*, vol. 1, no. 1, pp. 31–44, 2012.
- [2] B. Long, S. Y. Philip, and Z. M. Zhang, "A general model for multiple view unsupervised learning," in *Proc Int. Conf. Data Mining*, 2008, pp. 822–833.

- [3] F. Sha, Y. Lin, L. K. Saul, and D. D. Lee, "Multiplicative updates for nonnegative quadratic programming," *Neural Comput.*, vol. 19, no. 8, pp. 2004–2031, 2007.
- [4] Y.-X. Wang and Y.-J. Zhang, "Nonnegative matrix factorization: A comprehensive review," *IEEE Trans. Knowl. Data Eng.*, vol. 25, no. 6, pp. 1336–1353, Jun. 2013.
- [5] H. Li, M. Wang, and X.-S. Hua, "Msra-mm 2.0: A Large-scale web multimedia dataset," in *Proc. IEEE Int. Conf. Data Mining Work-shops*, 2009, pp. 164–169.
- [6] N. Chen, J. Zhu, and E. P. Xing, "Predictive subspace learning for multi-view data: A large margin approach," in *Proc. Adv. Neural Inf. Process. Syst.*, 2010, pp. 361–369.
- [7] C.-J. Lin, "Projected gradient methods for nonnegative matrix factorization," *Neural Comput.*, vol. 19, no. 10, pp. 2756–2779, 2007.
- [8] Y. Nesterov, "Gradient methods for minimizing composite functions," *Math. Programm.*, vol. 140, no. 1, pp. 125–161, 2013.
- [9] I. Kotsia, S. Zafeiriou, and I. Pitas, "A novel discriminant Non-negative matrix factorization algorithm with applications to facial image characterization problems," *IEEE Trans. Inf. Forensics Secu-rity*, vol. 2, no. 3–2, pp. 588–595, Sep. 2007.
- [10] A. Quattoni, X. Carreras, M. Collins, and T. Darrell, "An efficient projection for l_1 , infinity regularization," in *Proc. 26th Annu. Int. Conf. Mach. Learn.*, 2009, pp. 857–864.
- [11] N. Mohammadiha and A. Leijon, "Nonnegative matrix factoriza-tion using projected gradient algorithms with sparseness con-straints," in *Proc. IEEE Int. Symp. Signal Process. Inf. Technol.*, 2009, pp. 418–423.
- [12] J. Duchi, S. Shalev-Shwartz, Y. Singer, and T. Chandra, "Efficient projections onto the l_1 -ball for learning in high dimensions," in *Proc. 25th Int. Conf. Mach. Learn.*, 2008, pp. 272–279.