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Shortest Path Detection among the Clustering Nodes

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Abstract—***The main objective of this paper is to select the module first we need to provide source and destination addresses at source and destination IP address filed respectively .Next we need to select the node that needs to be sent to destination using the select button. If we want to know the shortest path among the clustering nodes first all the nodes will be sent to destination by selecting the node at server side .server side node will be sent to receiver side where we can calculate the time and speed. previous existing system consumes more time. To overcome this problem I am calculating the shortest time between the nodes.In this module I am selecting the destination for sending the node at server side. If the current node is not in the destination again browse the node and selecting the path then it will display shortest path among the nodes.***

Index terms—Clustering, Nodes, Destination, Path, Nodes, Source.

1 INTRODUCTION

Clustering is pervasive in science and designing with various application areas extending from bioinformatics and solution to the sociologies and the web . Maybe the most surely understood bunching calculation is the supposed "k-signifies" calculation or Lloyd's strategy. Lloyd's strategy is an iterative desire boost sort approach that endeavours to address the accompanying goal

At the point when an operator from the organization needs to decide the danger level of a potential new client, the specialist can utilize a grouping technique to decide the danger level of the client. In the first place, the specialist needs to create an information record q for the client containing certain individual data of the client, e.g., FICO rating, age, conjugal status, and so on. At that point this record can be sent to the cloud, and the cloud will register the class name for q. By and by, since q contains touchy data, to ensure the client's protection, q ought to be encoded before sending it to the cloud.

In addition, data can likewise determine valuable and touchy data about the real information things by watching the information access designs regardless of the possibility that the information are scrambled. Along these lines, the protection/security prerequisites of the DMED issue on a cloud are triple: secrecy of the scrambled information, classification of a client's inquiry record, and concealing information access designs. Existing work on Privacy-Preserving Data Mining (either bother or secure multi-party calculation based methodology) can't take care of the DMED issue.

Clustering

A PC bunch is a gathering of connected PCs, cooperating nearly so that in numerous regards they shape a solitary PC. The parts of a group are normally, yet not generally, associated with each other through quick neighbourhood. Bunches are normally conveyed to enhance execution and/or accessibility over that gave by a solitary PC, while regularly being considerably more practical than single PCs of similar rate or accessibility

Data mining

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Information mining is the way toward sorting through a lot of information and selecting applicable data. It is typically utilized by business knowledge associations, and budgetary investigators, however is progressively being utilized as a part of the sciences to concentrate data from the tremendous information sets produced by current trial and observational techniques. It has been portrayed as "the nontrivial extraction of understood, beforehand obscure, and possibly valuable data from information and "the exploration of separating helpful data from expansive information sets or databases " Data mining in connection to big business asset arranging is the factual and intelligent investigation of substantial arrangements of exchange information, searching for examples that can help basic leadership

2. Related Work

In this paper we discussed about the shortest path among the clustering nodes. shortest path can be detected by calculating time among the nodes in between the source and destination

Since the general assumption is that every user's need is different and time varying, the database cannot adopt a fixed clustering structure; and the total number of classes and the class member ship are not available before hand since these are assumed to be user dependant and time varying as well. Of course these rather extreme assumptions can be relaxed in a real world application to the degree of choice.

The K-means clustering algorithm is described in detail by Hartigan (1975). An efficient version of the algorithm is presented here. The aim of the K-means algorithm is to divide M points in N dimensions into K clusters so that the within-cluster sum of squares is minimized. It is not practical to require that the solution has minimal sum of squares against all partitions, except when M, N are small and K = 2. We seek instead "local" optima, solutions such that no movement of a point from one cluster to another will reduce the within-cluster sum of squares.

The algorithm requires as input a matrix of M points in N dimensions and a matrix of K initial cluster centres in N dimensions. The number of points in cluster L is denoted by NC(L). D(I, L) is the Euclidean distance between point I and cluster L. The general procedure is to search for a K-partition with locally optimal within-cluster sum of squares by moving points from one cluster to another.

3. Least Squares Quantization in PCM

Abstract-It has long been realized that in pulse-code modulation (PCM), with a given ensemble of signals to handle, the quantum values should be spaced more closely in the voltage regions where the signal amplitude is more likely to fall. It has been shown by that, in the limit as the number of quanta becomes infinite, the asymptotic fractional density of quanta per unit voltage should vary as the one-third power of the probability density per unit voltage of signal amplitudes. In this paper the corresponding result for any finite number of quanta is derived; that is, necessary conditions are found that the quanta and associated quantization intervals of an optimum finite quantization scheme must satisfy. The optimization criterion used is that the average quantization noise power be a minimum. It is shown that the result obtained here goes over into the result as the number of quanta become large. The optimum quantization schemes for 26 quanta, b = 1,2, t ,7, are given numerically for Gaussian and for Laplacian distribution of signal amplitudes

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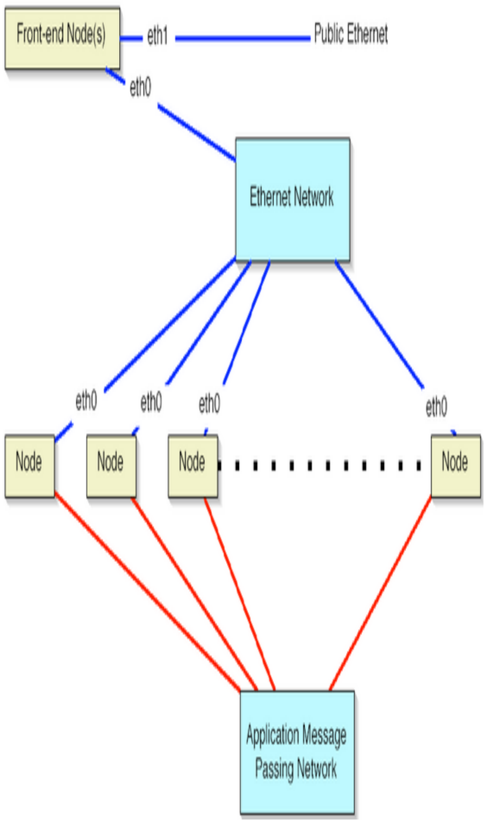
4.System model



5.REFERENCES

[1] R. Agrawal, J. Gehrke, D. Gunopulos, and P. Raghavan,"Automatic Subspace Clustering of High Dimensional Data for Data Mining Applications," SIGMOD 1998, Proc. ACM SIGMO DInt'l Conf. Management of Data, pp. 94-105, 1998.

[2] A.A. Alizadeh et al., "Distinct Types of Diffuse Large B-CellLymphoma Identified by Gene Expression Profiling," Nature,vol. 403, pp. 503-511, Feb. 2000.

[3] U. Alon, N. Barkai, D.A. Notterman, K. Gish, S. Ybarra, D. Mack, and A.J. Levine, "Broad Patterns of Gene Expression Revealed by Clustering Analysis of Tumor and Normal Colon Tissues Probed by Oligonucleotide Array," Proc. Nat'l Academy of Science, vol. 96,no. 12, pp. 6745-6750, June 1999.

[4] O. Alter, P.O. Brown, and D. Bostein, "Singular Value Decomposition for Genome-Wide Expression Data Processing and Modeling," Proc. Nat'l Academy of Science, vol. 97, no. 18,pp. 10101-10106, Aug. 2000.

[5] M. Ankerst, M.M. Breunig, H.-P. Kriegel, and J. Sander, "OPTICS:

Ordering Points to Identify the Clustering Structure," Sipp. 49-60, 1999.

[6] T. Sarlos, "Improved approximation algorithms for large matrices via random projections," in Proc. 47th Annu. IEEE Symp. Found. Comput. Sci. (FOCS), Oct. 2006, pp. 143–152. [19] C. Boutsidis, P. Drineas, and M. Magdon-Ismail. (2011). "Near optimal column based matrix reconstruction." [Online]. Available: http://arxiv.org/abs/1103.0995 [20] M. D. Vose, "A linear algorithm for generating random numbers with a given distribution," IEEE Trans. Softw. Eng., vol. 17, no. 9, pp. 972–975, Sep. 1991.

[7] M. Magdon-Ismail. (2010). "Row sampling for matrix algorithms via a non-commutative bernstein bound." [Online]. Available: http://arxiv.org/abs/1008.0587 [22] P. Indyk and R. Motwani, "Approximate nearest neighbors: Towards removing the curse of dimensionality," in Proc. 30th Annu. ACM Symp. Theory Comput. (STOC), 1998, pp. 604–613.

[8] N. Ailon and B. Chazelle, "Approximate nearest neighbors and the fast Johnson–Lindenstrauss transform," in Proc. 38th Annu. ACM Symp. Theory Comput. (STOC), 2006, pp. 557–563. [24] D. Achlioptas, "Database-friendly random projections: Johnson–Lindenstrauss with binary coins," J. Comput. Syst. Sci., vol. 66, no. 4, pp. 671–687, 2003.

[9] E. Liberty and S. W. Zucker, "The Mailman algorithm: A note on matrix–vector multiplication," Inf. Process. Lett., vol. 109, no. 3, pp. 179–182, 2009. [26] MATLAB, 7.13.0.564 (R2011b), MathWorks, Natick, MA, USA, 2010. [27] X. He, D. Cai, and P. Niyogi, "Laplacian score for

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feature selection," in Neural Information Processing Systems, Y. Weiss, B. Schölkopf, and J. Platt, Eds. Red Hook, NY, USA: Curran & Associates Inc., 2006, pp. 507–514. [28] Feature Ranking Using Laplacian Score. [Online]. Available: http://www.cad.zju.edu.cn/home/dengcai/Data/MCFS.html, accessed Jun. 4, 2013.

[10] K. Bache and M. Lichman. (2013). "UCI machine learning repository," School Inf. Comput. Sci., Univ. California, Irvine, CA, USA, Tech. Rep. [Online]. Available: http://archive.ics.uci.edu/ml [30] S. A. Nene, S. K. Nayar, and H. Murase. (Feb. 1996). "Columbia University image library," Tech. Rep. CUCS-005-96. [Online]. Available: http://www.cs.columbia.edu/CAVE/software/softlib/ coil-20.php

6.CONCLUSION

We are finding the shortest among the clustering nodes in between the source and destinationExisting algorithms uses matrices to produce partition. Distance between the matrices is used for calculation. Existing Schemes Consumes more time. So that here we are using the Dendrogram algorithm. It maintains a list of unvisited vertices. It chooses a vertex (the source) and assigns a maximum possible cost (i.e. infinity) to every other vertex. The cost of the source remains zero as it actually takes nothing to reach from the source vertex to itself when all the neighbours of the current node are considered; it marks the current node as visited and is removed from the unvisited list. At the end there will be no possibilities to improve it.

Author Profile

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B. Jaya Lakshmi received the B.Tech degrees in Computer Science and Engineering from Madanapalle Institute of Technology and Science in 2009 and 2013. She now M.Tech in Computer Science and Engineering in Madanapalle Institute of Technology and Science.