Quantitative Study of Markov Model for Prediction of User Behavior for Web Caching and Prefetching Purpose

International Journal of Computer Applications  
© 2013 by IJCA Journal  
Volume 65 - Number 15  
Year of Publication: 2013

Authors:  
Dharmendra T. Patel  
Kalpesh Parikh

10.5120/11004-6195

Abstract

In modern era every organization depends on internet to conduct business and as a result of that many hidden data are available in several log files of servers; which could serve many purposes in business and that give the birth of web mining field. Web Mining could useful for many applications in business but this paper focuses on web caching and prefetching application to reduce latency while accessing internet. The common problem in organization is; in spite of sufficient internet bandwidth; sometimes users feel delay while accessing several pages. The problem could be solved out by developing predictive model based on web caching and prefetching criteria and many research have been done using Markov based predictive model to reduce access latency while using internet. This paper focuses on quantitative study of Markov based predictive model for web caching and prefetching to determine limitations of Markov Model on prediction perspectives.

References

Quantitative Study of Markov Model for Prediction of User Behavior for Web Caching and Prefetching Purposes

Ninth IEEE International Conference, Pages-558-567.


- Ming-Syan Chen; Jiawei Han; Philip S. Yu, "Data Mining: An Overview from a Database Perspectives", IEEE Transactions on Knowledge and Data Engineering, Vol-8, December-1996, Pages-866–883.


- Technet Library, Microsoft Products, Tools, Technologies (www.technet.microsoft.com)


- Younghyun Kim ; Sangheon Pack ; Chung Gu Kang ; Soonjoon Park , &quot;Exploiting spatial and temporal locality for seamless vertical handover&quot;, IEEE Communications and Information Technology, ISCIT 2009, Pages-1078 – 1083.
- Ali Bayir ; Smart Miner: A New Framework for Mining Large Scale Web Usage Data, Murat, Department of Computer, Science and Engineering, University at Buffalo, USA.

**Index Terms**

Computer Science

Information Sciences

**Keywords**

Markov Model   Web Mining   Web Caching   Web Prefetching   Access Latency