Abstract

A remarkable technological development has been witnessed due to the recent advancements in the area of science and technology. This made the users to access the Internet and store the information retrieved in various databases at various servers across the globe, making World Wide Web as an information gateway. This technological growth has thrown a challenging situation to both the user and the business man. The various resources that are available through the Internet made the users to choose different alternatives which in turn makes it necessary for the businessman to bring out new strategies and alternatives so as to attract the users. In order to overcome these challenging situations, web usage mining brings out a solution to the business man by analyzing different user patterns that are available in the web. Many tools are available for this purpose but majority of the tools lag in including the complete details regarding the web log data. To overcome this disadvantage, in this paper a model based on Adaptive Gaussian Mixture Model, an extension of Gaussian Mixture Model (GMM) to interpret the user navigation behavior is brought out. The proposed model is applied on user traffic data taken from msnbc.com.
User Behavior Modeling based on Adaptive Gaussian Mixture Model

References

- Xiaofei He, Deng Cai, Yuanlong Shao, Hujun Bao, and Jiawei Han, "Laplacian Regularized Gaussian Mixture Model for Data Clustering," IEEE Transactions On Knowledge And Data Engineering, Vol. 23, No. 9, September 2011.
- "Introduction to Data Mining," Pang-Ning Tan, Vipin Kumar, Michael Steinbach.

Index Terms

Computer Science
Information Sciences

Keywords
Web usage mining Gaussian Mixture Model Adaptive Gaussian Mixture Model