Abstract

Location aware recommender system (LAS) make use of spatial ratings for generating personalized recommendations. It uses Collaborative filtering techniques to generate recommendations based on user location, item location or both user and item location. LAS uses spatial ratings for spatial items, Spatial ratings for Non-spatial items, Non spatial ratings for spatial items to generate personalized recommendation. For spatial ratings for non spatial items LAS uses user partitioning technique where spatial ratings are distributed as per user location in the pyramid. Pyramid Maintenance algorithm provided to achieve required scalability or locality. LAS is scalable as number of γ-cells are increased in pyramid and to improve locality α-cells are increased to maintain CF Model. LAS is efficient as compare to traditional recommendation system because algorithm provided is strong enough to cope challenge of locality and scalability.

Index Terms

Computer Science Algorithms

Keywords

Recommender system, spatial location, locality, pyramid structure.