Abstract

Recently, with the wide increase use of mobile devices, users are using it to achieve different types of tasks like multimedia and internet services. Many studies have been introduced to identify user's behaviors. The most common factor is the location. By knowing user's locations, set of required tasks can be provided for user. Mobility prediction is to predict the user's next location while moving. The recent advances in mobile phones like Global Positioning System (GPS) make it much easier to achieve such tasks. In this paper, modified Radial Basis Function Networks (RBF Network) algorithm is developed to predict user's locations. Proposed approach depend on clustering data using DBCLUM then using backpropagation algorithm for classifying data in on time using RBF Network. Experiment applied using weka 3.6 on Geolife dataset. Finally, prediction accuracy reported as 90%.

References

SIGSPATIAL International Conference on Advances in Geographic Information Systems (pp. 34-43). ACM.


**Index Terms**

Computer Science

Information Science

**Keywords**

Mobility Prediction   Neural Network   GPS   Location Based Service.