Auxiliary Training System for Preschool Education in Colleges and Universities Based on Feedback Data Mining: From the Perspective of MOOC

Qian HaiJuan
Xianyang Normal University
Xianyang, 712000, Shaanxi, China

Abstract:In this paper, a frequently closed moving trajectory pattern is defined in view of the large scale and redundant information of the frequent pattern of moving trajectory. Based on the classical closed sequential pattern mining algorithm, a frequent closed pattern suitable for moving trajectory data is proposed. Reflecting on the current teaching situation of the course, on the premise of further clarifying the training objectives and increasing the degree of emphasis, the "MOOC" and traditional teaching, the credit recognition of "MOOC", the language of "MOOC", and the development strategy of "MOOC" Research progress etc. Adapt to the actual needs of kindergarten music education, set up courses reasonably, and improve teaching content. The system can be used by teachers, students, and parents for pre-school education, and establish a simple interactive platform for teachers, students, and parents. Safe and reliable and other characteristics, it is worth promoting and using.

Keywords: Auxiliary Teaching System, Preschool Education, Feedback Data Mining, MOOC

1. INTRODUCTION

With the continuous development of mobile communication and positioning technology, it is possible to collect, transmit and store moving trajectory data by carrying portable devices. Use data mining, machine learning and other related technologies to mine and analyze the collected movement trajectory data, and then find valuable information and knowledge. [1].

The kindergarten teaching ability of highly educated preschool education graduates is not optimistic. Due to practical activities, students are motivated to participate in teaching, and students are guided to study actively, so that the teaching courses of preschool education majors in this college are also carried out in accordance with these five areas. Divide. Students fully realize the importance of practical application of teaching skills in classroom teaching [2].

With the rapid development of preschool education in higher education, college students have the ability to learn. More calls are made to strengthen the quality education of preschool educators [3]. As various colleges and universities in my country that train future preschool educators, we must carefully study what kind of professional quality students majoring in preschool education should have and should explore how to cultivate the teaching ability of students majoring more effectively in preschool education [4]. The current situation and trend of students' learning enthusiasm and efficiency gradually decrease, the main factors restricting students' learning enthusiasm are obtained, and strategies to promote students' rapid improvement of learning efficiency are explored.

The teaching content strives to be reasonable. The theoretical knowledge of pre-specialty majors has been significantly improved compared with the past [5]. At the same time, pre-school education majors in pre-school education majors should strengthen the training of preschool teachers and pay attention to education points. Practicing skills and professional skills. With the continuous development of mobile communication and positioning technology [6], it is possible to collect, transmit and store moving trajectory data by carrying portable devices. Use data mining, machine learning and other related technologies to mine and analyze the collected movement trajectory data, and then find valuable information and knowledge [7].

Using the distance and orientation of the mobile phone relative to the operator's base station to obtain relative position information has also become an important way to obtain movement trajectory data [8]. Although this method of obtaining location data involves the leakage of location privacy data of mobile network users. In addition to the above two mainstream methods. In addition, in terms of application, the discovered value information can provide decision-making basis for location-based services [9], urban public management, mobile social networks, precision advertising marketing and other fields. In addition, in terms of applications, the discovered value information can provide decision-making basis for the fields of location-based services, urban public management, mobile social networks, and precision advertising and marketing [10].

Why is there such a big gap between the preschool education talents we cultivate and the needs of the society? The solid theoretical foundation of preschool education given to students by higher education has not been well transformed into effective teaching behavior in the actual teaching work of kindergartens Woolen cloth. [11]

In my country, the training of students majoring in preschool education is mainly concentrated in normal colleges and universities at all levels [12]. At present, many college levels such as secondary vocational preschool teachers, preschool teachers' colleges, and normal universities have been formed. The professional structure has also formed by Secondary schools and colleges [13]. Moreover, the expensive price also makes it difficult for many products to be applied to more schools. Therefore, it is necessary to design a set of intelligent preschool education auxiliary management system from the perspective of improving preschool education and teaching management, improving the safety factor of children inside and outside the school, and helping teachers in teaching [14].

In addition, in terms of applications, the discovered value information can provide decision-making basis for the fields of location-based services, urban public management [15], mobile social networks, and precision advertising and marketing. The express delivery function in the catering or logistics APP (such as: Maiduan, Ele.me), the outdoor movement track recording function in the sports and health APP (such as: Joy Run, keep), the positioning in the map APP Navigation function [16].

2. THE PROPOSED METHODOLOGY

2.1 The Feedback Data Mining

However, due to the time-space cross-evolution relationship and background knowledge constraints (urban road network, regional function positioning, etc.) contained in the moving trajectory data, and the behavioral characteristics of the movers are implied behind the moving trajectory, and secondly, the current The scale of trajectory data is huge, and the processing efficiency of the built-in algorithm in the framework must be considered in order to solve it in real scenarios. Finally, it should be noted that existing algorithms for adjoint behavior patterns mainly rely on semi-supervised methods to handle critical parts.

The movement trajectory data can be represented in the form of a quadruple as shown below: <Xi, Yi, It, Oi>, where <Xi, Yi> represents the spatial position information of the moving object, and it represents the time information corresponding to the spatial position information, related research will still use this idea of time slicing to find travel partners and even group behavior patterns. However, because of the difficulty of collecting complete data and the sparseness of data, the use of inappropriate time slices makes clustering trajectory data face some problems.

As time-continuous behavioral sequence data, the frequent pattern set is prone to the overlapping and redundancy of multiple mining patterns, and the prevalence of similar mobile behavioral characteristics in the same community group in the real society highlights to a certain extent. This problem. One-person-multiple-machine (MCMP) behavior mode is defined as follows: a situation in which the moving trajectories containing multiple mobile phones have significant clustering or even highly overlapping trajectory characteristics in a very short time, and the overall duration of this situation is relatively long. Proposed The Closet raj algorithm is a frequent closed pattern mining algorithm suitable for moving trajectory data, which minimizes the size of the patterns mined when mining patterns on moving trajectory data. The overall process of MCMP pattern discovery is shown, and it can be seen that in the trajectory clustering There are obvious differences in the stages, and the whole process can be regarded as three main stages, among which the filtering and merging of pseudo-adjoint can be regarded as a whole stage.

2.2 The Preschool Education Teaching Auxiliary Teaching System in Colleges and Universities

The design, language, development strategy, etc. have been investigated and researched, which more comprehensively reflects the latest development of "MOOC" in EU universities, and undoubtedly has great reference significance for the construction of "MOOC" in Chinese universities. The second is the lack of humanistic care of "presence". Cultural centers generally have insufficient understanding of MOOCs. They only regard MOOCs as learning videos published on their own websites, and do not regard MOOCs as a teaching process between teachers and students and between students. Scholars such as Zhong Boc hang, a professor at South China Normal University, have pointed out that the mobile behavior pattern characteristics of specific users can be obtained at the individual level.

For example, starting from home in the morning, taking public transport to reach the unit through a fixed route, and going home along the same route in the afternoon or going out to eat. Theoretical discussion on the characteristics and laws of music learning. As far as the author understands, at present in many colleges and universities, schools and teachers still use the name teaching method by convention. Therefore, for the convenience of expression, this article still uses the name teaching method. The digital teaching system is a network management system that integrates teaching management, student learning, examination, evaluation, and management. It can effectively organize and process various resources and maximize the utilization rate of various resources. Android is an open-source mobile operating system based on Linux platform developed by Google, which includes operating system, user interface and application programs.

The client is developed using Android JAVA, and txt text files are used for data storage. Under the interactive influence of the post-epidemic era and the post-MOOC era, the development of MOOCs has shown the following two trends: First, the online and offline hybrid education model has become the mainstream. In the future, the online and offline boundaries of MOOCs will be further blurred, "; and at the group level, the common behavior patterns of large-scale users can be obtained, and on this basis, the flow rules of crowds in different areas of the city can be studied., the choice of transportation routes for citizens to travel, etc. At present, the talents trained by the preschool education major in colleges and universities reflect the characteristics of high theoretical level and low teaching ability, which shows that for a long time we have paid more attention to the teaching of preschool education theory courses and neglected teaching.

2.3 The Data Mining of Preschool Education Feedback Based on MOOC Perspective

The "virtuality" of online teaching has triggered the dissolution and reconstruction of the traditional teacher-student relationship. Therefore, in order for teachers to overcome the shortcomings of "gap" teaching, it is necessary to increase the influence of teachers and teaching assistants on MOOCs. Therefore, through the mobile frequent pattern mining, how to get the most comprehensive information in the final mobile pattern set, and the smallest data scale of the mobile pattern set is a problem that needs to be considered. Even far beyond the requirements stipulated in the pre-school professional music syllabus, the ability to improvise accompaniment is very different, and even a simple children's song that has just been acquired cannot be played well, let alone. The accompaniment will be transposed.

In the future teaching of relevant courses, the application of modern media to disseminate digital teaching resources that are conducive to the cultivation of students' professional emotions, such as pictures and videos of children's teaching, special reports by outstanding preschool educators, etc. Extract the key information as the file name of the saved file. The names of files saved with different key information are different, and no additional operations are required when saving. When using it, you only need to know the name of the student, and you can check all the location information and

time of the student in the school. Integrate multi-source heterogeneous data, conduct comprehensive information aggregation, and map bundled information such as real-name information to specific users, so as to build a relationship network between users or a relationship network between users and multiple devices.

Form user portraits of specific groups; Huizhou Cultural Center has built a MOOC teaching field of "online video courses + WeChat tutoring group" and created a "sense of presence" similar to the physical classroom through the "five-step MOOC method". In the first step, the Cultural Center holds a class opening ceremony in the MOOC WeChat group. It shows the basic process of frequent closed pattern mining: Merge reduction for speed comparison, linear interpolation of missing data, and Kalman filter removal of noisy data, etc.

3. CONCLUSIONS

Under the new development trend of MOOCs, small and medium-sized cultural centers should change the thinking of "moving courses", do a good job in the "second half article" of the MOOCs, give full play to the advantages of being flexible and close to the public, and make full use of the advantages of being flexible and close to the public. Intensive cultivation". The cultivation of teaching skills of preschool education students is related to their success in early childhood education work in the future. Under the situation that the degree of educational informatization is becoming more and more perfect, various colleges and institutions that train preschool education students should actively carry out the application and research of using the digital teaching system to cultivate the teaching skills of preschool students. Using the depth-first search method and the frequent closed pattern mining algorithm based on classical sequence data, the Closet raj algorithm is proposed for the above problems.

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