

CLAIMS

1. A method for generating an information recommendation, the method comprising:
 - retrieving, by one or more processors, historical behavioral information of a user, the historical behavioral information comprising data associated to operations performed by the user on a server (S101);
 - determining, by the one or more processors, a plurality of recommended information sets based on the historical behavioral information (S102);
 - generating, by the one or more processors, a plurality of weight coefficients, each weight coefficient of the plurality of weight coefficients being generated for each recommended information set of the plurality of recommended information sets;
 - determining, by the one or more processors, a recommendation list based on a plurality of weight coefficients(S103);
 - determining, by the one or more processors, whether the recommendation list satisfies a predetermined recommendation condition (S104); and
 - in response to determining that the recommendation list satisfies the recommendation condition, transmitting, by the one or more processors, a recommendation based on the recommendation list to the user (S105); or
 - in response to determining that the recommendation list does not satisfy the recommendation condition, performing operations comprising:
 - adjusting, by the one or more processors, each weight coefficient of each recommended information set,
 - determining, by the one or more processors, a new recommendation list based on the adjusted weight coefficient until the determined recommendation list satisfies the recommendation condition, and
 - transmitting, by the one or more processors, a recommendation based on the recommendation list to the user (S106).
2. The method according to claim 1, further comprising:
 - dividing the historical behavioral information of the user into test information and reference

information.

3. The method according to claim 2, wherein determining whether the recommendation list satisfies a predetermined recommendation condition comprises:

determining an accuracy of the recommendation list based on the reference information;

determining whether the accuracy is greater than a predetermined threshold; and

if the accuracy is greater than the threshold, determining that the recommendation list satisfies the predetermined recommendation condition; or if the accuracy is not greater than the threshold, determining that the recommendation list does not satisfy the predetermined recommendation condition.

4. The method according to claim 2, wherein determining the plurality of recommended information sets based on the historical behavioral information comprises:

determining the plurality of recommended information sets through a plurality of recommendation algorithms different from each other, the test information comprising results of a portion of the historical behavioral information analyzed by the plurality of recommendation algorithms.

5. The method according to claim 4, wherein the plurality of recommendation algorithms comprise two or more of a collaborative filtering-based recommendation algorithm, a content-based recommendation algorithm, an association rule-based recommendation algorithm, and a knowledge-based recommendation algorithm.

6. The method according to claim 5, wherein the association rule-based recommendation algorithm comprises:

obtaining text data sent by a client to a first server, the text data comprising a plurality of key words and a subject that is statistically determined based on the plurality of key words (11);

determining whether a predetermined information recommendation rule set comprises an information recommendation rule used for matching the text data, wherein the information recommendation rule is set based on an information to be recommended and matching the text

data comprises searching the plurality of key words in a Trie constructed based on the information recommendation rule (12); and

if the predetermined information recommendation rule set comprises the information recommendation rule matching the text data, obtaining the information to be recommended matching the matched information rule and provided by a second server (13).

7. The method according to claim 6, wherein obtaining the information to be recommended provided by the second server comprises:

triggering the second server to push the information to be recommended, and obtaining the information to be recommended pushed by the second server; or

downloading the information to be recommended from the second server.

8. The method according to claim 7, wherein triggering the second server to push the information to be recommended comprises:

directly sending an information acquisition request to the second server, and receiving the information to be recommended sent by the second server in response to the information acquisition request; or

triggering an information pushing application to send the information acquisition request to the second server, and receiving the information to be recommended sent by the second server in response to the information acquisition request by using the information pushing application.

9. The method according to claim 8, wherein the information acquisition request comprises a feature of the information to be recommended.

10. The method according to claim 9, wherein the feature of the information to be recommended comprises at least one of the following features:

a subject of the information to be recommended;

a key word of the information to be recommended;

a number of the information to be recommended; and

an identifier of the information recommendation rule that corresponds to the information to

be recommended.

11. The method according to any one of claims 1 to 10, wherein determining the recommendation list comprises:

for each recommended information set, determining a sub-weight coefficient of each piece of information comprised in the recommended information set based on a weight coefficient of the recommended information set and a recommended weight coefficient of each piece of information relative to the recommended information set;

for each piece of information, determining a sum of sub-weight coefficients of the pieces of information relative to all recommended information sets, and using the sum as a total weight coefficient of the particular piece of information; and

determining the recommendation list based on the total weight coefficient of each piece of information.

12. The method according to any one of claims 1 to 11, wherein adjusting the weight coefficient of each recommended information set comprises:

determining a value of an adjustment to the weight coefficient of each recommended information set based on an iteration information; and

adjusting the weight coefficient of each recommended information set based on the determined value of the adjustment.

13. The method according to claim 12, wherein the iteration information comprises at least one of a value of a previous adjustment of the weight coefficient of each recommended information set, an accuracy of a recommendation list that was previously determined, and highest accuracy value of a plurality of accuracy values of previously determined recommendation lists.

14. The method according to claim 12, further comprising:

determining the most accurate one in all obtained recommendation lists when the number of adjustments to the weight coefficient of each recommended information set reaches a predetermined number of times; and

recommending information comprised in the most accurate recommendation list to the user.

15. An apparatus for generating an information recommendation, the apparatus comprising a plurality of modules configured to perform the method of any one of claims 1 to 10.