

CLAIMS

1. A computer-implemented method for targeted information display based on historical user behavior, the method comprising:

receiving an information acquisition request sent by a client, wherein the client comprises a graphical user interface having a plurality of display locations arranged in a fixed order, wherein each display location of the plurality of display locations occupies a corresponding space on the graphical user interface, wherein each display location of the plurality of display locations facilitates a respective functionality of a plurality of functionalities provided by the client, and wherein the information acquisition request comprises an identifier of a source display location of the plurality of display locations and an identifier of a user that requests to obtain information;

identifying a display location trajectory diagram that corresponds to the user identifier, wherein an order in which the user historically browses two or more of the plurality of display locations is recorded in the display location trajectory diagram;

determining a target display location of the plurality of display locations based on the display location trajectory diagram, the target display location being associated with the source display location and being noncontiguous with the source display location in the graphical user interface, wherein the target display location is a predicted location that is likely to be browsed by the user, the target display location comprising a priority higher than a neighboring location contiguous with the source display location in the graphical user interface;

retrieving target information that corresponds to the target display location by skipping neighboring information corresponding to the neighboring location that is between the target display location and the source display location on the graphical user interface; and

transmitting the information to the client that corresponds to the user identifier for display in the target display location, wherein the plurality of display locations are continued to be displayed on the graphical user interface of the client in the fixed order after the transmitting of the information to the client.

2. The computer-implemented method of claim 1, wherein the display location trajectory diagram comprises display location data uploaded by the client and representing display locations historically browsed by the user, wherein the display location data comprises a user identifier, display location identifiers, and a timestamp, and wherein display locations that

correspond to the display location identifiers in the display location data are associated with the user identifier in the display location data in order of the timestamp.

3. The computer-implemented method of claim 1, wherein identifying the display location trajectory diagram comprises:

identifying the display location trajectory diagram for a target display location associated with the source display location and after the source display location;

determining that there is more than one target display location;

in response to determining that there is more than one target display location, retrieving a priority of each target display location; and

determining a target display location with a highest priority as a final target display location.

4. The computer-implemented method of claim 3, wherein the priority of each target display location is based on a number of times the user has browsed each target display location.

5. The computer-implemented method of claim 1, further comprising:

after identifying the display location trajectory diagram:

identifying a user preference diagram that corresponds to the user identifier, the user preference diagram indicating an information type in a display location historically tapped by the user; and

querying the user preference diagram for an information type that corresponds to the target display location.

6. The computer-implemented method of claim 5, wherein transmitting the information to the client that corresponds to the user identifier for display in the target display location comprises:

pushing information of an identified information type to the target display location in the client that corresponds to the user identifier.

7. The computer-implemented method of claim 5, wherein the user preference diagram comprises information data uploaded by the client and historically tapped by the user, wherein the information data comprises a user identifier, a display location identifier, and an

information type, and wherein the user preference diagram associates the display location identifier with the information type in the information data with the user identifier in the information data.

8. The computer-implemented method of claim 5, wherein querying the user preference diagram comprises:

determining whether the target display location is not identified in the user preference diagram based on the target display location; and

in response to determining that the target display location is not identified in the user preference diagram based on the target display location, randomly determining an information type as the information type that corresponds to the target display location .

9. The computer-implemented method of claim 6, wherein pushing information of the identified information type to the target display location in the client that corresponds to the user identifier comprises:

determining that there is more than one target display location;

in response to determining that there is more than one target display location, retrieving a priority of each information type;

determining information of an information type with a highest priority as information to be sent; and

pushing the information to be sent to the more than one target display location in the client that corresponds to the user identifier.

10. The computer-implemented method of claim 9, wherein the priority of each information type is determined based on a number of uploads associated with each information type.

11. The computer-implemented method of any one of claims 1 to 10, wherein the information comprises an advertisement;

the display location comprises an advertisement display location;

the information type comprises an advertisement type; and

the display location trajectory diagram comprises an advertisement display location trajectory diagram.

12. An apparatus for targeted information display based on historical user behavior , the apparatus comprising a plurality of modules configured to perform the method of any one of claims 1 to 11.

13. A non-transitory, computer-readable medium for targeted information display based on historical user behavior, the non-transitory, computer-readable medium storing one or more instructions executable by a computer system to perform the method of any one of claims 1 to 11.

14. A computer-implemented system for targeted information display based on historical user behavior, the computer-implemented system comprising:

one or more computers; and

one or more computer memory devices interoperably coupled with the one or more computers and having tangible, non-transitory, machine-readable media storing one or more instructions that, when executed by the one or more computers, perform the method of any one of claims 1 to 11.