CLAIMS

What is claimed is:

1. A method for mining a user intention based on user transaction data, wherein the method comprises:

obtaining a pre-constructed time-sequence transaction graph, wherein the time-sequence transaction graph is constructed based on user transaction data of each user, the time-sequence transaction graph comprises a node and a connection edge, a single node corresponds to a single fund container of a single user, and each connection edge corresponds to one transaction;

obtaining a user intention sub-graph corresponding to a specific user intention, wherein the user intention sub-graph has a specified target graph structure, and each node in the target graph structure has a specified fund container type;

matching the user intention sub-graph with the time-sequence transaction graph comprises: splitting the time-sequence transaction graph into multiple fund chain sub-graphs, wherein a start node and an end node of each fund chain sub-graph each have a specified fund container type; and matching the user intention sub-graph with each fund chain sub-graph in a distributed manner, to obtain a first transaction sub-graph included in each fund chain sub-graph, wherein the first transaction sub-graph has the target graph structure; and

determining, based on the specific user intention, a user intention of a target user to whom the first transaction sub-graph relates.

2. The method according to claim 1, wherein the determining a user intention of a target user to whom the first transaction sub-graph relates comprises:

determining a user corresponding to a node of an initial fund source in the first transaction sub-graph as a user with the specific user intention.

3. The method according to claim 1, wherein the obtaining a user intention sub-graph corresponding to a specific user intention comprises:

displaying nodes respectively corresponding to multiple fund container types;

receiving a node selection instruction and a connection establishment instruction of the user; and

selecting a node corresponding to a target fund container type according to the node selection instruction, and adding a connection edge between two nodes according to the connection establishment instruction, to obtain the user intention sub-graph.

4. The method according to claim 1, wherein the obtaining a user intention sub-graph corresponding to a specific user intention comprises:

receiving a user intention sub-graph described by using domain specific language, wherein the domain specific language is used to indicate a fund container type of each node comprised in the user intention sub-graph and a connection edge between two nodes.

5. The method according to claim 1, wherein each node in the time-sequence transaction graph has corresponding node attribute information, each connection edge has corresponding edge attribute information, and node attribute information and/or edge attribute information of the user intention sub-graph satisfy a preset constraint condition; and

the matching the user intention sub-graph with the time-sequence transaction graph comprises:

separately matching the user intention sub-graph with a graph structure, node attribute information, and/or edge attribute information of the time-sequence transaction graph to obtain the first transaction sub-graph, wherein node attribute information and/or edge attribute information of the first transaction sub-graph satisfy the constraint condition.

6. The method according to claim 5, wherein the node attribute information comprises a user identifier corresponding to the node, and the constraint comprises a restriction on whether user identifiers of nodes are consistent.

7. The method according to claim 5, wherein the edge attribute information comprises time information of a transaction corresponding to the connection edge, and the constraint condition comprises a restriction on a time sequence of connection edges.

8. The method according to claim 5, wherein the edge attribute information comprises amount information of a transaction corresponding to the connection edge, and the constraint condition comprises a restriction on amounts of connection edges.

9. The method according to claim 5, wherein the edge attribute information comprises a direction of the connection edge, and the constraint condition comprises a restriction on the direction of the connection edge.

10. The method according to claim 1, wherein each node in the time-sequence transaction graph has corresponding node attribute information, and each connection edge has corresponding edge attribute information; and

after the obtaining a first transaction sub-graph comprised in the time-sequence transaction graph, the method further comprises:

obtaining node attribute information of a target node in the first transaction sub-graph or edge attribute information of a target connection edge for display.

11. An apparatus for mining a user intention based on user transaction data, wherein the apparatus comprises:

a first obtaining unit, configured to obtain a pre-constructed time-sequence transaction graph, wherein the time-sequence transaction graph is constructed based on user transaction data of each user, the time-sequence transaction graph comprises a node and a connection edge, a single node corresponds to a single fund container of a single user, and each connection edge corresponds to one transaction;

a second obtaining unit, configured to obtain a user intention sub-graph corresponding to a specific user intention, wherein the user intention sub-graph has a specified target graph structure, and each node in the target graph structure has a specified fund container type;

a matching unit, configured to match the user intention sub-graph obtained by the second obtaining unit with the time-sequence transaction graph obtained by the first obtaining unit, to obtain a first transaction sub-graph comprised in the time-sequence transaction graph, wherein the matching unit comprises: a splitting sub-unit, configured to split the time-sequence transaction graph into multiple fund chain sub-graphs,

wherein a start node and an end node of each fund chain sub-graph each have a specified fund container type; and an execution sub-unit, configured to match, in a distributed manner, the user intention sub-graph with each fund chain sub-graph obtained by the splitting sub-unit, to obtain a first transaction sub-graph included in each fund chain sub-graph, wherein the first transaction sub-graph has the target graph structure; and

a determining unit, configured to determine, based on the specific user intention, a user intention of a target user to whom the first transaction sub-graph obtained by the matching unit relates.

12. A computer-readable storage medium storing a computer program, wherein when the computer program is executed on a computer, the computer is enabled to perform the method according to any one of claims 1 to 10.

13. A computing device, comprising a memory and a processor, wherein the memory stores executable code, and when the processor executes the executable code, the method according to any one of claims 1 to 10 is implemented.