datasets and latency, the system generates its own training data. Furthermore, the training data may be stored off-chain in order to resolve potential latency issues. However, as opposed to training data on conventional blockchain data (e.g., transactional data), which, as described above, may be too limited for proper training, the system may rely on blockchain action lineages that are derived from the previously described network map. The blockchain action lineages may indicate self-executing program characteristics corresponding to each self-executing program of a plurality of self-executing programs used to conduct one or more blockchain actions. For example, not only may the system train the artificial intelligence platform on the self-executing program characteristics on the mapped network, but the system may also identify and/or map one or more blockchain action characteristics of blockchain actions conducted over the mapped network. By doing so, the system may provide recommendations for both conducting blockchain actions on a network and also recommendations on the most efficient and/or beneficial manner in which to conduct those actions.

[0011a] In an aspect, the present disclosure refers to a system for facilitating use of artificial intelligence platforms trained on blockchain action lineages to conduct blockchain actions, the system comprising:

one or more processors; and

one or more non-transitory, computer-readable mediums comprising instructions recorded thereon on that, when executed by the one or more processors cause operations, comprise:

accessing an internal index, wherein the internal index comprises on-chain self-executing program characteristics and off-chain self-executing program characteristics, and wherein the on-chain self-executing program characteristics and off-chain self-executing program characteristics are archived in the internal index based on respective temporal identifiers;

generating, based on the internal index, a mapping of a first network;

determining, based on the mapping, a first subset of blockchain action lineages used to conduct a first subset of blockchain actions, wherein the first subset of blockchain action lineages indicates self-executing program characteristics corresponding to each self-executing program of a first plurality of self-executing programs used to conduct one or more of the first subset of blockchain actions;

generating, based on the first subset of blockchain action lineages, training data for an artificial intelligence platform that is trained to generate predictions for performing blockchain actions on the first network by adjusting weights of the artificial intelligence platform according to the training data;

receiving a first self-executing program requirement for a requested blockchain action across the first network, wherein the first self-executing program requirement indicates a required security certificate for the requested blockchain action;

determining a first feature input based on the first self-executing program requirement and the requested blockchain action;

inputting the first feature input into the artificial intelligence platform to generate a first output, wherein the first output comprises a predicted security certificate for using a second plurality of self-executing programs to perform the requested blockchain action; and

based on the first output, performing the requested blockchain action using the second plurality of self-executing programs.

[0011b] In an aspect, the present disclosure refers to a method for facilitating use of artificial intelligence platforms trained on blockchain action lineages to conduct blockchain actions, the method comprising:

receiving a first self-executing program requirement for a requested blockchain action across a first network;

determining a first feature input based on the first self-executing program requirement and the requested blockchain action;

inputting the first feature input into an artificial intelligence model to generate a first output, wherein the artificial intelligence model is trained to generate predictions for performing blockchain actions on the first network by adjusting weights of the artificial intelligence model according to a first subset of blockchain action lineages used to conduct a first subset of blockchain actions, wherein the first subset of blockchain action lineages indicates self-executing program characteristics corresponding to each self-executing program of a first plurality of self-executing programs used to conduct one or more of the first subset of blockchain actions; and

performing the requested blockchain action based on the first output.

[0012] In some examples, the systems may maintain an internal index for training the artificial intelligence model to map and facilitate actions across a blockchain network. The internal index

may be annotated to record self-executing program characteristics detected on-chain as well as additional self-executing program characteristics and self-executing program requirements detected off-chain. The internal index may also include data read from databases and logs, including blocks, state databases, transaction receipts, log entries, and/or archive nodes. By using the internal index that includes both on-chain and off-chain self-executing program characteristics, the artificial intelligence model mitigates the lack of large datasets to adequately train artificial intelligence models. However, the use of the internal index does not resolve the issue of latency in the training process. For example, latency in updating the internal index may cause the same issues as latency on the blockchain itself. Accordingly, the internal index also archives the on-chain and off-chain self-executing program characteristics based on a temporal identifier (e.g., a timestamp) at which the on-chain and off-chain self-executing program characteristics were collected. The artificial intelligence model may then ingest this temporal identifier along with the on-chain and off-chain self-executing program characteristics themselves. The artificial intelligence model may then use the temporal identifiers to account for latency in collection (e.g., adjusting confidence metrics, model parameters, and/or model weights) based on the temporal identifiers. By doing so, the systems and methods account for the potential latency in on-chain and off-chain data.

[0013] In some examples, systems and methods are described for facilitating use of artificial intelligence platforms trained on blockchain action lineages to conduct blockchain actions. The system may receive a first self-executing program requirement for a requested blockchain action across a first network. The system may determine a first feature input based on the first self-executing program requirement and the requested blockchain action. The system may input the first feature input into an artificial intelligence model to generate a first output, wherein the artificial intelligence model is trained to generate predictions for performing blockchain actions on the first network by adjusting weights of the artificial intelligence model according to a first subset of blockchain action lineages used to conduct a first subset of blockchain actions, wherein the first subset of blockchain action lineages indicates self-executing program characteristics corresponding to each self-executing program of a first plurality of self-executing programs used to conduct one or more of the first subset of blockchain actions. The system may perform the requested blockchain action based on the first output.

[0014] Various other aspects, features, and advantages of the invention will be apparent through the detailed description of the invention and the drawings attached hereto. It is also to be understood that both the foregoing general description and the following detailed description are examples and are not restrictive of the scope of the invention. As used in the specification and in the claims, the singular forms of "a," "an," and "the" include plural referents unless the context clearly dictates otherwise. In addition, as used in the specification and the claims, the term "or" means "and/or" unless the context clearly dictates otherwise. Additionally, as used in the specification, "a portion" refers to a part of, or the entirety of (i.e., the entire portion), a given item (e.g., data) unless the context clearly dictates otherwise.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] FIG. 1 shows an illustrative diagram for generating network mappings of self-executing program characteristics, in accordance with one or more embodiments.

[0016] FIG. 2 shows an illustrative diagram of a blockchain network, in accordance with one or more embodiments.

[0017] FIG. 3 shows an illustrative diagram for performing a blockchain action, in accordance with one or more embodiments.

WHAT IS CLAIMED IS:

1. A system for facilitating use of artificial intelligence platforms trained on blockchain action lineages to conduct blockchain actions, the system comprising:

one or more processors; and

one or more non-transitory, computer-readable mediums comprising instructions recorded thereon on that, when executed by the one or more processors cause operations, comprise:

accessing an internal index, wherein the internal index comprises on-chain self-executing program characteristics and off-chain self-executing program characteristics, and wherein the on-chain self-executing program characteristics and off-chain self-executing program characteristics are archived in the internal index based on respective temporal identifiers;

generating, based on the internal index, a mapping of a first network;

determining, based on the mapping, a first subset of blockchain action lineages used to conduct a first subset of blockchain actions, wherein the first subset of blockchain action lineages indicates self-executing program characteristics corresponding to each self-executing program of a first plurality of self-executing programs used to conduct one or more of the first subset of blockchain actions;

generating, based on the first subset of blockchain action lineages, training data for an artificial intelligence platform that is trained to generate predictions for performing blockchain actions on the first network by adjusting weights of the artificial intelligence platform according to the training data;

receiving a first self-executing program requirement for a requested blockchain action across the first network, wherein the first self-executing program requirement indicates a required security certificate for the requested blockchain action;

determining a first feature input based on the first self-executing program requirement and the requested blockchain action;

inputting the first feature input into the artificial intelligence platform to generate a first output, wherein the first output comprises a predicted security certificate for using a second plurality of self-executing programs to perform the requested blockchain action; and

based on the first output, performing the requested blockchain action using the second plurality of self-executing programs.

2. A method for facilitating use of artificial intelligence platforms trained on blockchain action lineages to conduct blockchain actions, the method comprising:

receiving a first self-executing program requirement for a requested blockchain action across a first network;

determining a first feature input based on the first self-executing program requirement and the requested blockchain action;

inputting the first feature input into an artificial intelligence model to generate a first output, wherein the artificial intelligence model is trained to generate predictions for performing blockchain actions on the first network by adjusting weights of the artificial intelligence model according to a first subset of blockchain action lineages used to conduct a first subset of blockchain actions, wherein the first subset of blockchain action lineages indicates self-executing program characteristics corresponding to each self-executing program of a first plurality of self-executing programs used to conduct one or more of the first subset of blockchain actions; and

performing the requested blockchain action based on the first output.

3. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

based on the first output, determining a first blockchain lineage for performing the requested blockchain action; and

using the first blockchain lineage to perform the requested blockchain action.

4. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

based on the first output, determining a second plurality of self-executing programs for use in performing the requested blockchain action; and

using the second plurality of self-executing programs to perform the requested blockchain action.

5. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

based on the first output, determining a first self-executing program characteristic for performing the requested blockchain action; and

using the first self-executing program characteristic to perform the requested blockchain action.

6. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

based on the first output, determining a first self-executing program for performing the requested blockchain action; and

using the first self-executing program to perform the requested blockchain action.

7. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

based on the first output, determining a first plurality of locations across the first network for performing the requested blockchain action; and

determining a first series of network connections to the first plurality of locations.

8. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

based on the first output, determining a first digital asset corresponding to the requested blockchain action; and

executing the requested blockchain action on the first digital asset.

9. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

based on the first output, determining a first temporal identifier corresponding to performing the requested blockchain action; and

using the first temporal identifier to perform the requested blockchain action.

10. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

based on the first output, predicting an availability of a first computer resource; and

based on the availability, using the first computer resource to perform the requested blockchain action.

11. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

determining a type of the requested blockchain action; and

based on the first output, determining whether to prioritize the requested blockchain action based on the type.

12. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

performing deep packet inspection of the requested blockchain action; and

based on the deep packet inspection, determining whether to prioritize the requested blockchain action.

13. The method of claim 2, wherein the artificial intelligence model is further trained to generate predictions for performing blockchain actions by:

identifying a first cryptography-based storage application corresponding to one or more of the first subset of blockchain action lineages; and

correlating the first cryptography-based storage application to a known entity.

14. The method of claim 2, wherein the artificial intelligence model is further trained to generate predictions for performing blockchain actions by:

determining a pattern corresponding to one or more of the first subset of blockchain action lineages; and

determining an anomaly in the pattern.

15. The method of claim 2, wherein performing the requested blockchain action based on the first output further comprises:

based on the first output, determining a predicted blockchain action characteristic for the requested blockchain action; and

comparing the predicted blockchain action characteristic to the first self-executing program requirement to determine whether to perform the requested blockchain action.