CLAIMS

1. An edge computing-based control method, applied to an edge device, and comprising:

acquiring an analysis processing tool for implementing image analysis processing in a cloud server;

performing, in a case where the cloud server is in a fault state, image analysis processing on a to-be-processed image with the analysis processing tool to obtain an analysis processing result; and

synchronizing the analysis processing result to the cloud server,

wherein the analysis processing tool comprises a computer vision algorithmic model, and performing the image analysis processing on the to-be-processed image with the analysis processing tool to obtain the analysis processing result comprises:

performing feature information extraction on a target object in the to-be-processed image with the computer vision algorithmic model to obtain first feature information; and

determining the analysis processing result based on the first feature information,

wherein the first feature information is a first face feature, the analysis processing tool further comprises a feature information library, and determining the analysis processing result based on the first feature information comprises:

searching a second face feature matching with the first face feature from the feature information library; and

determining information associated with the second face feature in the feature information library as the analysis processing result,

wherein after acquiring the analysis processing tool for implementing the image analysis processing in the cloud server, the method further comprises:

acquiring, in a case where the cloud server obtains feature update information, the feature update information from the cloud server; and

updating the feature information library with the feature update information.

2. The method of claim 1, after acquiring the analysis processing tool for implementing the image analysis processing in the cloud server, further comprising:

acquiring, in a case where the cloud server generates a model update software package, the model update software package from the cloud server; and

updating the computer vision algorithmic model with the model update software package.

3. The method of claim 1, further comprising:

acquiring a present configuration file in the cloud server;

acquiring, in a case of detecting a configuration file of an upgrade version from the cloud server, the configuration file of the upgrade version in the cloud server; and

updating the present configuration file to the configuration file of the upgrade version.

4. The method of claim 1, wherein synchronizing the analysis processing result to the cloud server comprises:

storing the analysis processing result; and

synchronizing, in a case where the cloud server is converted from the fault state into a normal state, the analysis processing result to the cloud server.

5. An edge device, comprising: a central processor, a graphics processor, a memory and a communication bus, wherein

the communication bus is configured to implement connection and communication among the central processor, the graphics processor and the memory; and

the central processor and the graphics processor are configured to execute one or more programs stored in the memory, to implement following steps:

acquiring an analysis processing tool for implementing image analysis processing in a cloud server;

performing, in a case where the cloud server is in a fault state, image analysis processing on a to-be-processed image with the analysis processing tool to obtain an analysis processing result; and

synchronizing the analysis processing result to the cloud server,

wherein the analysis processing tool comprises a computer vision algorithmic model, and for the step of performing the image analysis processing on the to-be-processed image with the analysis processing tool to obtain the analysis processing result, the central processor and the graphics processor are configured to implement following steps:

performing feature information extraction on a target object in the to-be-processed image with the computer vision algorithmic model to obtain first feature information; and

determining the analysis processing result based on the first feature information,

wherein the first feature information is a first face feature, the analysis processing tool further comprises a feature information library, and for the step of determining the analysis processing result based on the first feature information, the central processor and the graphics processor are configured to implement following steps:

searching a second face feature matching with the first face feature from the feature information library; and

determining information associated with the second face feature in the feature

information library as the analysis processing result,

wherein after acquiring the analysis processing tool for implementing the image analysis processing in the cloud server, the central processor and the graphics processor are further configured to implement following steps:

acquiring, in a case where the cloud server obtains feature update information, the feature update information from the cloud server; and

updating the feature information library with the feature update information.

6. The edge device of claim 5, after acquiring the analysis processing tool for implementing the image analysis processing in the cloud server, the central processor and the graphics processor are further configured to implement following steps:

acquiring, in a case where the cloud server generates a model update software package, the model update software package from the cloud server; and

updating the computer vision algorithmic model with the model update software package.

7. The edge device of claim 5, the central processor and the graphics processor are further configured to implement following steps:

acquiring a present configuration file in the cloud server;

acquiring, in a case of detecting a configuration file of an upgrade version from the cloud server, the configuration file of the upgrade version in the cloud server; and

updating the present configuration file to the configuration file of the upgrade version.

8. The edge device of claim 5, wherein for the step of synchronizing the analysis processing

result to the cloud server, the central processor and the graphics processor are further configured to implement following steps:

storing the analysis processing result; and

synchronizing, in a case where the cloud server is converted from the fault state into a normal state, the analysis processing result to the cloud server.

9. A non-volatile computer-readable storage medium, storing one or more programs, wherein the one or more programs are executable by one or more processors, to implement the edge computing-based control method of any one of claims 1 to 4.

10. A computer program, applied to an edge device, wherein the computer program executable by one or more processors, to implement the edge computing-based control method of any one of claims 1 to 4.

11. An edge computing-based control apparatus, applied to an edge device, and comprising:

a communication module, which is configured to acquire an analysis processing tool for implementing image analysis processing in a cloud server; and

a processing module, which is configured to perform, in a case where the cloud server is in a fault state, image analysis processing on a to-be-processed image with the analysis processing tool to obtain an analysis processing result,

wherein the communication module is further configured to synchronize the analysis processing result to the cloud server,

wherein the analysis processing tool comprises a computer vision algorithmic model, and the processing module is specifically configured to:

perform feature information extraction on a target object in the to-be-processed image with the computer vision algorithmic model to obtain first feature information; and

determine the analysis processing result based on the first feature information;

wherein the first feature information is a first face feature, the analysis processing tool further comprises a feature information library, and the processing module is specifically configured to:

search a second face feature matching with the first face feature from the feature information library; and

determine information associated with the second face feature in the feature information library as the analysis processing result,

wherein the communication module is further configured to acquire, in a case where the cloud server obtains feature update information, the feature update information from the cloud server, and

the apparatus further comprises an updating module, the updating module is configured to update the feature information library with the feature update information.