

CLAIMS

1. An anchor determination method, comprising:

performing feature extraction on an image to be processed to obtain a first feature map of the image to be processed; and

performing anchor prediction on the first feature map via an anchor prediction network to obtain position information of anchors and shape information of the anchors in the first feature map, the position information of the anchors referring to information about positions in the first feature map where the anchors are generated,

wherein the anchor prediction network comprises a position prediction sub-network,

wherein the performing the anchor prediction on the first feature map via the anchor prediction network to obtain the position information for generating the anchors in the first feature map comprises:

inputting the first feature map into the position prediction sub-network to determine probabilities of generating the anchors in positions in the first feature map; and

determining, as the position information of the anchors, information about positions where the probabilities are greater than or equal to a preset threshold.

2. The method according to claim 1, further comprising:

performing feature correction on the first feature map based on the shape information of the anchors via a correction network to obtain a second feature map.

3. The method according to claim 2, wherein the correction network comprises a first convolution layer and a second convolution layer,

wherein the performing the feature correction on the first feature map based on the shape information of the anchors via the correction network to obtain the second feature map comprises:

inputting the shape information of the anchors into the first convolution layer to obtain an offset of the second convolution layer; and

inputting the first feature map and the offset into the second convolution layer to obtain the second feature map.

4. The method according to claim 2 or 3, further comprising:

performing classification and anchor correction on the anchors and the second feature map to obtain an identification result of the image to be processed.

5. The method according to claim 2 or 3, further comprising:

performing classification and anchor correction on the anchors and the second feature map to obtain a recommended region of the image to be processed; and

performing classification and region correction on the recommended region and the second feature map to obtain an identification result of the image to be processed.

6. The method according to claim 1, wherein the performing the feature extraction on the image to be processed to obtain the first feature map of the image to be processed comprises:

performing the feature extraction on the image to be processed by using a pre-trained feature extraction network to obtain the first feature map of the image to be processed.

7. An anchor determination apparatus, comprising:

a feature extraction module, configured to perform feature extraction on an image to be processed to obtain a first feature map of the image to be processed; and

an anchor prediction module, configured to perform anchor prediction on the first feature map via an anchor prediction network to obtain position information of anchors and shape information of the anchors in the first feature map, the position information of the anchors referring to information about positions in the first feature map where the anchors are generated,

,wherein the anchor prediction network comprises a position prediction sub-network, and the anchor prediction module comprises:

a probability generation sub-module, configured to input the first feature map into the position prediction sub-network to determine probabilities of generating the anchors in positions in the first feature map; and

a position information determination sub-module, configured to determine, as the position information of the anchors, information about positions where the probabilities are greater than or equal to a preset threshold.

8. The apparatus according to claim 7, further comprising:

a correction module, configured to perform feature correction on the first feature map

based on the shape information of the anchors via a correction network to obtain a second feature map.

9. The apparatus according to claim 8, wherein the correction network comprises a first convolution layer and a second convolution layer, and

the correction module comprises:

a first convolution sub-module, configured to input the shape information of the anchors into the first convolution layer to obtain an offset of the second convolution layer; and

a second convolution sub-module, configured to input the first feature map and the offset into the second convolution layer to obtain the second feature map.

10. The apparatus according to claim 8 or 9, further comprising:

a first identification result determination module, configured to perform classification and anchor correction on the anchors and the second feature map to obtain an identification result of the image to be processed.

11. The apparatus according to claim 8 or 9, further comprising:

a recommended region determination module, configured to perform classification and anchor correction on the anchors and the second feature map to obtain a recommended region of the image to be processed; and

a second identification result determination module, configured to perform classification and region correction on the recommended region and the second feature map to obtain an identification result of the image to be processed.

12. The apparatus according to claim 7, wherein the feature extraction module comprises:

a feature extraction sub-module, configured to perform the feature extraction on the image to be processed by using a pre-trained feature extraction network to obtain the first feature map of the image to be processed.