What is claimed is:

1. A method for image processing, comprising:

for each processing method in a preset set of processing methods, determining a first feature parameter and a second feature parameter according to image data to-be-processed, wherein the preset set comprises at least two processing methods selected from whitening methods and/or normalization methods, and the image data to-be-processed comprises at least one image data;

determining a weighted average of at least two first feature parameters according to a weight coefficient of each first feature parameter, and determining a weighted average of at least two second feature parameters according to a weight coefficient of each second feature parameter; and

whitening the image data to-be-processed according to the weighted average of the at least two first feature parameters and the weighted average of the at least two second feature parameters.

2. The method of claim 1, wherein the first feature parameter is an average vector and the second feature parameter is a covariance matrix.

3. The method of claim 1 or 2, wherein

whitening the image data to-be-processed according to the weighted average of the at least two first feature parameters and the weighted average of the at least two second feature parameters is executed by a neural network.

4. The method of claim 3, further comprising:

for each processing method in the preset set,

determining a weight coefficient of a first feature parameter of the processing method in the preset set according to a normalized exponential function by utilizing a value of a first control parameter of the processing method in the neural network; and

determining a weight coefficient of a second feature parameter of the processing method in the preset set according to the normalized exponential function by utilizing a value of a second control parameter of the processing method in the neural network.

5. The method of claim 4, wherein obtaining first control parameters and second control parameters of the processing methods in the preset set comprises:

based on a back propagation approach for the neural network, jointly optimizing first control parameters, second control parameters, and network parameters of a neural network to-be-trained by minimizing a value of a loss function of the neural network to-be-trained;

assigning values of the first control parameters corresponding to the smallest value of the loss function of the neural network to-be-trained to values of first control parameters of a trained neural network; and

assigning values of the second control parameters corresponding to the smallest value of the loss function of the neural network to-be-trained to values of second control parameters of the trained neural network.

6. The method of claim 5, wherein based on the back propagation approach for the neural network, jointly optimizing the first control parameters, the second control parameters, and the network parameters of the neural network to-be-trained by minimizing the value of the loss function of the neural network to-be-trained comprises:

whitening, by the neural network to-be-trained, image data for training according to the weighted average of the first feature parameters and the weighted average of the second feature parameters of the processing methods in the preset set, and outputting a prediction result by the neural network to-be-trained, wherein an initial value of a first control parameter of a first processing method of in the preset set is a first preset value, and an initial value of a second control parameter of the first processing method of in the preset set is a second preset value;

determining the value of the loss function of the neural network to-be-trained according to the prediction result output by the neural network to-be-trained and an annotation result of the image data for training; and

adjusting values of the first control parameters, the second control parameters, and the network parameters of the neural network to-be-trained according to the value of the loss function of the neural network to-be-trained.

7. The method of claim 5 or 6, wherein whitening the image data to-be-processed according

to the weighted average of the at least two first feature parameters and the weighted average of the at least two second feature parameters comprises:

whitening each image data in the image data to-be-processed according to the weighted average of the at least two first feature parameters, the weighted average of the at least two second feature parameters, and the number of channels, the height, and the width of the image data to-be-processed.

8. The method of claim 1, wherein the normalization method comprises at least one of: batch normalization, instance normalization, and layer normalization.

9. The method of claim 1, wherein the whitening method comprises at least one of: batch whitening and instance whitening.

10. A device for image processing, comprising:

a determining module configured to determine, for each processing method in a preset set of processing methods, a first feature parameter and a second feature parameter according to image data to-be-processed, wherein the preset set comprises at least two processing methods selected from whitening methods and/or normalization methods, and the image data to-be-processed comprises at least one image data;

a weighting module configured to determine a weighted average of at least two first feature parameters according to a weight coefficient of each first feature parameter, and determine a weighted average of at least two second feature parameters according to a weight coefficient of each second feature parameter; and

a whitening module configured to whiten the image data to-be-processed according to the weighted average of the at least two first feature parameters and the weighted average of the at least two second feature parameters.

11. The device of claim 10, wherein the first feature parameter is an average vector and the second feature parameter is a covariance matrix.

12. The device of claim 10 or 11, wherein a function of the whitening module is executed by

a neural network.

13. The device of claim 12, wherein the device is further configured to:

for each processing method in the preset set,

determine a weight coefficient of a first feature parameter of the processing method in the preset set according to a normalized exponential function by utilizing a value of a first control parameter of the processing method in the neural network; and

determine a weight coefficient of a second feature parameter of the processing method in the preset set according to the normalized exponential function by utilizing a value of a second control parameter of the processing method in the neural network.

14. The device of claim 13, further comprising a training module, wherein first control parameters and second control parameters of the processing methods in the preset set are obtained through training of the neural network by the training module and the training module is configured to:

based on a back propagation approach for the neural network, jointly optimize first control parameters, second control parameters, and network parameters of a neural network to-be-trained by minimizing a value of a loss function of the neural network to-be-trained;

assign values of the first control parameters corresponding to the smallest value of the loss function of the neural network to-be-trained to values of first control parameters of a trained neural network; and

assign values of the second control parameters corresponding to the smallest value of the loss function of the neural network to-be-trained to values of second control parameters of the trained neural network.

15. The device of claim 14, wherein the training module is configured to:

whiten image data for training according to the weighted average of the first feature parameters and the weighted average of the second feature parameters of the processing methods in the preset set in the neural network to-be-trained, and output a prediction result, wherein an initial value of a first control parameter of a first processing method of in the preset set is a first preset value, and an initial value of a second control parameter of the first processing method of

in the preset set is a second preset value;

determine the value of the loss function of the neural network to-be-trained according to the prediction result output by the neural network to-be-trained and an annotation result of the image data for training; and

adjust values of the first control parameters, the second control parameters, and the network parameters of the neural network to-be-trained according to the value of the loss function of the neural network to-be-trained.

16. The device of claim 14 or 15, wherein the whitening module is configured to:

whiten each image data in the image data to-be-processed according to the weighted average of the at least two first feature parameters, the weighted average of the at least two second feature parameters, and the number of channels, the height, and the width of the image data to-be-processed.

17. The device of claim 10, wherein the normalization method comprises at least one of: batch normalization, instance normalization, and layer normalization.

18. The device of claim 10, wherein the whitening method comprises at least one of: batch whitening and instance whitening.

19. An electronic device, comprising a processor and a memory configured to store computer executable instructions, which when run by the processor, are configured to implement the method of any of claims 1-8.

20. A computer readable storage medium storing computer programs, which when executed by a processor, are configured to implement the method of any of claims 1-8.