the two frames of the second speech and using at least one acoustic score of the frames of the second speech for an acoustic score of an adjacent frame, of the first speech, that is adjacent to the two frames of the first speech.

20. The method of claim **19**, wherein the calculating of the acoustic score of the first speech comprises using an acoustic score of either one of the two frames of the first speech or one of the two frames of the second speech as the acoustic score of the adjacent frame based on a determined temporal distance between the adjacent frame and the two frames of the first speech which are temporally on both sides of the adjacent frame.

21. The method of claim **19**, wherein the calculating of the acoustic score of the first speech comprises using, as the acoustic score of the adjacent frame, a statistical value of the acoustic scores of the two frames of the first speech or acoustic scores of the two frames of the second speech, or using a statistical value obtained by applying a weighted value to the acoustic scores of the two frames of the first speech, or to the acoustic scores of the two frames of the second speech, based on a determined temporal distance between the adjacent frame and the two frames of the first speech.

22. A speech recognition apparatus, the apparatus comprising:

a frame set extractor configured to extract one or more frame sets, each differently including less than all frames of an input first training speech;

a training data generator configured to generate one or more second training speeches by respectively using the extracted one or more frame sets; and

a model trainer configured to train the acoustic model by using the generated one or more second training speeches.

23. The apparatus of claim **22**, wherein the acoustic model is a Bidirectional Recurrent Deep Neural Network (BRDNN).

24. The apparatus of claim **23**, further comprising a processor that includes the frame set extractor, the training data generator, and the model trainer, the processor further configured to:

extract select frames from a first speech of a user for recognition;

generate a second speech using the extracted select frames; and

recognize the first speech based on calculated acoustic scores of frames, of the first speech and other than the select frames, using acoustic scores of the second speech calculated by the acoustic model.

25. The apparatus of claim **22**, wherein the frame set extractor extracts each of an i-th frame set according to m*K+i and from an N number of all of the frames of the first training speech, wherein i is any integer of $1 \leq i \leq K$ is any integer of $2 \leq K \leq N$, and m is any integer of $i \leq mk+i \leq N$.

26. A speech recognition method, the method comprising:

extracting one or more frame sets, each differently including less than all frames of an input first training speech;

generating one or more second training speeches by using the extracted one or more frame sets; and

training the acoustic model by using the generated one or more second training speeches.

27. The method of claim **26**, wherein the acoustic model is a Bidirectional Recurrent Deep Neural Network (BRDNN).

28. The method of claim **26**, wherein the extracting of the frame sets comprises:

setting a value i for a reference frame i to be 1, and a value of K to be a predetermined integer;

extracting, from all of the frames of the first training speech, an i-th frame set which includes respective m*K+i-th frames obtained by incrementing a value of m by 1 from 0;

incrementing i by 1 and, after the incrementing and in response to i not being greater than the value of K, repeating the extraction of the i-th frame set, and in response to i being greater than the value of K, ceasing the extracting of the one or more frame sets.

29. A speech recognition apparatus, the apparatus comprising:

a processor configured to:

identify select frames from all frames of a first speech of a user;

calculate respective acoustic scores of the identified select frames by providing information of the identified select frames, less than all frames of the first speech, to an acoustic model as combined speech to calculate the respective acoustic scores of the identified select frames; and

calculate respective acoustic scores of frames, of the first speech, other than the identified select frames based on one or more of the calculated respective scores of the identified select frames.

30. The speech recognition apparatus of claim **29**, wherein the identifying of the select frames includes extracting the identified select frames, from all frames of the first speech, according to one or more predetermined intervals to respectively intermittently extract frames from the first speech to collectively provide to the acoustic model as a connected second speech.

31. The speech recognition apparatus of claim **29**, wherein the processor is further configured to recognize the first speech based on the calculated respective acoustic scores of the extracted select frames and the calculated respective acoustic scores of the frames other than the extracted select frames.

32. The speech recognition apparatus of claim **31**, wherein the calculating of the respective acoustic scores of the extracted select frames include determining respective acoustic scores of the identified select frames of the first speech to have same respective acoustic scores as acoustic scores of corresponding temporally same frames, of the extracted select frames, calculated through provision of the second speech to the acoustic model.

33. The speech recognition apparatus of claim **29**, wherein the acoustic model is an acoustic model trained using a set of first non-temporally contiguous speech frames from temporally contiguous speech frames of training data.

34. The speech recognition apparatus of claim **33**, wherein the acoustic model is an acoustic model further trained using a set of second non-temporally contiguous speech frames from the temporally contiguous speech frames of the training data, the set of first non-temporally contiguous speech frames having one or more different speech frames from the set of second non-temporally contiguous speech frames.

35. The speech recognition apparatus of claim **34**, wherein the processor is further configured to generate the acoustic model by training the acoustic model using the set