[Patent Document 1]

Japanese Unexamined Patent Application, First Publication No. 2017-173881

[Patent Document 2]

Japanese Unexamined Patent Application, First Publication No. 2006-079190

SUMMARY

[0004]

It is important not only to evaluate content read through optical character recognition but also to evaluate precision of a result of the optical character recognition. For example, when a checker of a result of optical character recognition can know reliability of a reading result, it is possible to take measures of causing the checker to check the result very carefully or causing two checkers to perform double-checking, if the reliability is low.

[0005]

Embodiments of the present disclosure seek to provide an image-processing device, an image-processing method, and a program capable of solving the above-described problems.

[0006]

According to a first aspect of the present disclosure, an image-processing device includes: a reliability calculation means for calculating, on the basis of a descriptive feature value relating to a format, which indicates attributes of characters or coordinates of a range of a character string in a document image, of a specific item which is specified in advance among a plurality of items indicating kinds of information included in the document image, reliability of a result of a character recognition process, of the character

string of the specific item obtained by the character recognition process for the document image which is a target of the character recognition process;

and an image output means for outputting an image of the result of the character recognition process depicting the character string of the specific item in a display mode which is different in accordance with the reliability.

[0007]

According to a second aspect of the present disclosure, an image-processing method includes: calculating, on the basis of a descriptive feature value relating to a format, which indicates attributes of characters or coordinates of a range of a character string in a document image, of a specific item which is specified in advance among a plurality of items indicating kinds of information included in the document image, reliability of a result of a character recognition process, of the character string of the specific item obtained by the character recognition process for the document image which is a target of the character recognition process; and outputting an image of the result of the character recognition process depicting the character string of the specific item in a display mode which is different in accordance with the reliability.

[0008]

According to a third aspect of the present disclosure, a non-transitory computer-readable storage medium that stores a program causes a computer to perform processing of: calculating, on the basis of a descriptive feature value relating to a format which indicates attributes of characters or coordinates of a range of a character string in a document image, of a specific item which is specified in advance among a plurality of items indicating kinds of information included in the document image, reliability of a result of a character recognition process, of the character string of the specific item obtained by the character recognition process for the document image which is a target of the character recognition process; and outputting an image of the result of the character recognition process depicting the character string of the specific item in a display mode

which is different in accordance with the reliability.

[0009]

According to embodiments of the present disclosure, it is possible to evaluate precision of a result of optical character recognition.

BRIEF DESCRIPTION OF THE DRAWINGS

CLAIMS

1. An image-processing device, comprising:

a reliability calculation means for calculating, on the basis of a descriptive feature value relating to a format, which indicates attributes of characters or coordinates of a range of a character string in a document image, of a specific item which is specified in advance among a plurality of items indicating kinds of information included in the document image, reliability of a result of a character recognition process, of the character string of the specific item obtained by the character recognition process for the document image which is a target of the character recognition process ; and

an image output means for outputting an image of the result of the character recognition process depicting the character string of the specific item in a display mode which is different in accordance with the reliability.

2. The image-processing device according to Claim 1, wherein the reliability calculation means calculates the reliability of the result of the character recognition process of the character string of the specific item, on the basis of the descriptive feature values, which are recorded in advance based on learning results obtained using a plurality of document images, of character strings of the specific item for each specific item of the plurality of document images.

3. The image-processing device according to Claim 2, wherein the reliability calculation means calculates the reliability on the basis of the degree of variation of the descriptive feature value in the descriptive feature values recorded in advance based on the learning results obtained using the plurality of document images.

4. The image-processing device according to Claim 2 or 3, wherein the reliability calculation means calculates the reliability on the basis of the degree of deviation of the descriptive feature value in the document image which is the target of the character recognition process, with respect to the descriptive feature values recorded in advance based on the learning results obtained using the plurality of document images.

5. An image-processing method, comprising:

calculating, on the basis of a descriptive feature value relating to a format, which indicates attributes of characters or coordinates of a range of a character string in a document image, of a specific item which is specified in advance among a plurality of items indicating kinds of information included in the document image, reliability of a result of a character recognition process, of the character string of the specific item obtained by the character recognition process for the document image which is a target of the character recognition process; and

outputting an image of the result of the character recognition process depicting the character string of the specific item in a display mode which is different in accordance with the reliability.

6. A non-transitory computer-readable storage medium that stores a program causing a computer to perform processing of:

calculating, on the basis of a descriptive feature value relating to a format, which indicates attributes of characters or coordinates of a range of a character string in a document image, of a specific item which is specified in advance among a plurality of items indicating kinds of information included in the document image, reliability of a

result of a character recognition process, of the character string of the specific item obtained by the character recognition process for the document image which is a target of the character recognition process; and

outputting an image of the result of the character recognition process depicting the character string of the specific item in a display mode which is different in accordance with the reliability.