

IMAGE PROCESSING SYSTEM, IMAGE PROCESSING METHOD, AND PROGRAM

CROSS-REFERENCES

BACKGROUND

Aspects of the present invention relate to an image processing system, an image processing method, and a program.

In recent years, systems for carrying out monitoring over a wide range using video images from a plurality of cameras are being considered. For example, Patent Publication JP-A-2008-219570 discloses a device that is capable of appropriately tracking (monitoring) a person across cameras using inter-camera coupling relation information. The device determines a correspondence relation of a person in accordance with a similarity in person feature quantities between a point where a person appears in a camera view (an appearing point) and a point where the person disappears from the camera view (a vanishing point).

When person re-identification is automatically determined according to similarity as is the case of the device described in Patent Publication JP-A-2008-219570, errors occur with a probability. In consideration thereof, person re-identification is implemented with human involvement.

However, increasing human involvement with respect to monitoring is highly likely to complicate monitoring work. In particular, when there is a plurality of persons who are subjects under monitoring, it may become difficult for a user to comprehend for which person operations are being performed, or operations for specifying a person may become complicated.

SUMMARY

Some of the aspects of the present invention have been made in consideration of such problems, and embodiments of these aspects provide an image processing system, an image processing method, and a program capable of suppressing confusion that may arise with respect to identifying a target person when tracking a person.

According to a first aspect of the present invention, there is provided an image processing system comprising: input means for accepting input video images captured by a plurality of video cameras; registering means capable of registering one or more persons appearing in the video images inputted from the input means; and display control means for displaying switchable windows of the video images inputted from the video cameras for each person registered by the registering means, wherein the display control means displays switchable windows of video images inputted from the video cameras in windows respectively associated with registered persons, and wherein the display control means prompts the windows to be switched to other windows when a registered person is predicted to appear in the video image before the registered person appears.

Disclosed herein is an image processing system including: input means for accepting input video images captured by video cameras; and display control means for displaying for each registered person a switchable window of the video image inputted from the video camera, this display control means displaying information related to the video camera that has captured the person and a time of the image capture.

Disclosed herein is an image processing system including: input means for accepting input video images captured by video cameras; and display control means for displaying for each registered person a switchable window of the video image inputted from the video camera, this display control means displaying map information showing trace of movement of each registered person.

According to a second aspect of the present invention, there is provided an image processing method implemented by an image processing system, the method comprising the steps of: accepting input video images captured by a plurality of video cameras; registering one or more persons appearing in the inputted video images; and displaying switchable windows of the video images inputted from the video cameras for each registered person, wherein the switchable windows of video images inputted from the video cameras in windows are respectively associated with registered persons, and wherein the windows are prompted to be switched to other windows when a registered person is predicted to appear in the video image before the registered person appears.

According to a third aspect of the present invention, there is provided a storage medium storing program causing a computer to execute the processes of: accepting input video images captured by a plurality of video cameras; registering one or more persons appearing in the inputted video images; and displaying switchable windows of the video images inputted from the video cameras for each registered person, wherein the switchable windows of video images inputted from the video cameras in windows are respectively associated with registered persons, and wherein the windows are prompted to be switched to other windows when a registered person is predicted to appear in the video image before the registered person appears.

Moreover, as used in embodiments of the present invention, the terms “unit”, “means”, “device”, and “system” not only signify physical means but also include cases where functions of the “unit”, “means”, “device”, and “system” are realized by software. In addition, functions of one “unit”, “means”, “device”, or “system” may be realized by two or more physical means or devices, and functions of two or more “units”, “means”, “devices”, or “systems” may be realized by one physical means or device.

According to embodiments of the present invention, an image processing system, an image processing method, and a program capable of suppressing confusion that may arise with respect to identifying a target person when tracking a person can be provided.

CLAIMS

~~I (We)~~ claim: CLAIMS

1. An image processing system comprising:
input means for accepting input video images captured by a plurality of video cameras;
registering means capable of registering one or more persons appearing in the video images inputted from the input means; and
display control means for displaying switchable windows of the video images inputted from the video cameras for each person registered by the registering means,
wherein the display control means displays switchable windows of video images inputted from the video cameras in windows respectively associated with registered persons, and
wherein the display control means prompts the windows to be switched to other windows when a registered person is predicted to appear in the video image before the registered person appears.
- ~~2. The image processing system according to claim 1, wherein~~
~~the display control means displays switchable windows of video images inputted from the video cameras in windows respectively associated with persons registered by the registering means.~~
- ~~3~~2. The image processing system according to claim ~~2~~1, wherein
the display control means prompts the windows to be switched to other windows when a person registered by the registering means is captured in the video images inputted from the video cameras.
- ~~4. The image processing system according to claim 2, wherein~~
~~the display control means prompts the windows to be switched to other windows when a person registered by the registering means is predicted to appear in the video images inputted from the video cameras.~~
- ~~5~~3. The image processing system according to claim ~~2~~1, wherein
a plurality of video images inputted from the input means are respectively arranged in the windows.

64. An image processing method implemented by an image processing system, the method comprising the steps of:
accepting input video images captured by a plurality of video cameras;
registering one or more persons appearing in the inputted video images; and
displaying switchable windows of the video images inputted from the video cameras for each registered person,

wherein the switchable windows of video images inputted from the video cameras in windows are respectively associated with registered persons, and

wherein the windows are prompted to be switched to other windows when a registered person is predicted to appear in the video image before the registered person appears.

75. A storage medium storing program causing a computer to execute the processes of:

accepting input video images captured by a plurality of video cameras;
registering one or more persons appearing in the inputted video images; and
displaying switchable windows of the video images inputted from the video cameras for each registered person,

wherein the switchable windows of video images inputted from the video cameras in windows are respectively associated with registered persons, and

wherein the windows are prompted to be switched to other windows when a registered person is predicted to appear in the video image before the registered person appears.