DESCRIPTION

Title of Invention

INFORMATION PROCESSING DEVICE, INFORMATION PROCESSING METHOD, AND PROGRAM

Technical Field

[0001] The present disclosure relates to an information processing apparatus, an information processing method, and a program.

Background Art

[0002] There is a technology of managing entry and exit of a person passing through a gate installed at a train station, an airport, or the like. For example, Patent Literature (hereinafter referred to as “PTL”) 1 describes an apparatus that, in a case where a person is authorized to pass through a gate by using a radio card and enters the gate from the entrance of the gate, tracks whether the person has passed through the gate (whether the person has returned to the entrance of the gate) based on a change in the position of the radio card.

Citation List

Patent Literature

[0003]

PTL 1

Japanese Patent Application Laid-Open No. H09-330440

Summary

[0004] In a gate system (for example, a face authentication gate system) in which a person is authorized to pass through a gate without using a radio card carried by the person, there is

room for consideration as to how to surely determine whether the person has passed through a passageway in the gate.

[0005] One non-limiting example of the present disclosure facilitates providing an information processing apparatus, an information processing method, and a program each capable of improving the determination accuracy of determining whether a person has passed through a specific passageway such as a passageway in a gate.

[0006] An information processing apparatus according to one exemplary example of the present disclosure includes: a detector that performs detection of a foreign object, in an image obtained by capturing a passageway from above, for each of a plurality of zones set to the passageway, where the foreign object is an object not included in the image in a stationary state; and a determiner that determines whether a person corresponding to the foreign object has passed through the passageway based on a change over time in a zone in which the foreign object is detected, among the plurality of zones.

[0006a] In one aspect, the present disclosure refers to an information processing apparatus, comprising, a detector that performs detection of a foreign object, in an image obtained by capturing a passageway from above, for each of a plurality of zones set to the passageway, the foreign object being an object not included in the image in a stationary state, and a determiner that determines whether a person corresponding to the foreign object has passed through the passageway based on a change over time in a zone in which the foreign object is detected, among the plurality of zones.

[0006b] In another aspect, the present disclosure refers to an information processing method, comprising, performing, by one or more information processing apparatuses, detection of a foreign object, in an image obtained by capturing a passageway from above, for each of a plurality of zones set to the passageway, the foreign object being an object not included in the image in a stationary state, and determining, by the one or more information processing apparatuses, whether a person corresponding to the foreign object has passed

through the passageway based on a change over time in a zone in which the foreign object is detected, among the plurality of zones.

[0006c] In yet another aspect, the present disclosure refers to a program that causes one or more information processing apparatuses to perform, processing of performing detection of a foreign object, in an image obtained by capturing a passageway from above, for each of a plurality of zones set to the passageway, the foreign object being an object not included in the image in a stationary state, and processing of determining whether a person corresponding to the foreign object has passed through the passageway based on a change over time in a zone in which the foreign object is detected, among the plurality of zones.

[0007] It should be noted that a general or specific example may be implemented as a system, an apparatus, a method, an integrated circuit, a computer program, a storage medium, or any selective combination thereof.

[0008] One exemplary example of the present disclosure makes it possible to improve the determination accuracy of determining whether a person has passed through a specific passageway such as a passageway in a gate.

[0009] Additional benefits and advantages of the disclosed examples will become apparent from the specification and drawings. The benefits and/or advantages may be individually obtained by the various examples and features of the specification and drawings, which need not all be provided in order to obtain one or more of such benefits and/or advantages.

Brief Description of Drawings