Claims

1. A device, comprising:

one or more processors to:

receive video of a facility from an image capture system, the video showing at least one of:

an individual within the facility,

an object within the facility, or

an activity being performed within the facility;

process the video using a technique to identify the individual, the object, or the activity,

where the one or more processors, when processing the video, are to:

process the video to identify a histogram of an article of clothing associated with the individual;

track the individual, the object, or the activity through the facility to facilitate an analysis of the individual, the object or the activity;

where the one or more processors, when tracking the individual, the object, or the activity, are to:

track the individual through the video based on the histogram,

where the video was captured from the different cameras, of the image capture system, located within a threshold distance of each other and was captured within a threshold amount of time of each other;

perform the analysis of the individual, the object, or the activity using information related to tracking the individual, the object, or the activity;

where the one or more processors, when performing the analysis of the individual, the object, or the activity, are to:

determine a score for the individual based on the information related to tracking the individual;

the score indicating a measure of performance associated with the individual; and

perform an action related to the individual, the object, or the activity based on the score,

the action to impact operations of the facility.

2. The device of claim 1, where the one or more processors are further to:

map information identifying the individual, the object, or the activity to a map of the facility after tracking the individual, the object, or the activity; and

where the one or more processors, when performing the analysis, are to:

perform the analysis using a result of mapping the information to the map of the facility.

3. The device of claims 1 or claim 2, where:

the object comprises a vehicle, and

the activity comprises a maintenance activity.

4. The device of claims 1-3, where the one or more processors are further to:

identify the object by identifying a license plate of the object,

the object being a vehicle.

5. The device of claims 1-4, where the one or more processors are further to:

identify the activity based on at least one of:

a tool shown in the video,

particular motion shown in the video, or

the video showing that the individual is a threshold distance from the object; and

where the one or more processors, when performing the analysis, are to:

perform the analysis after identifying the activity.

6. The device of claims 1-5, where:

the video is received from one or more video cameras,

the one or more video cameras being located above a vehicle maintenance area of the facility to permit plan view tracking of the individual, the object, or the activity.

7. The device of claims 1-6, where the one or more processors are further to:

identify a location of the object after processing the video, and/or

identify a location of the individual after processing the video.

8. A method, comprising:

receiving, by a device, an image of a maintenance facility from an image capture system,

the image depicting:

an individual within the maintenance facility,

equipment within the maintenance facility on which the individual is to perform a maintenance activity, or

an activity being performed within the maintenance facility;

processing, by the device, the image using an image processing technique to identify the individual, the equipment, or the activity;

where processing the image comprises:

process the image to identify a histogram of an article of clothing associated with the individual;

tracking by the device, the equipment, or the activity through multiple images of the maintenance facility to facilitate an analysis of the individual, the equipment, or the activity;

wherein tracking the individual, the equipment, or the activity comprises:

tracking the individual through the multiple images based on the histogram, where the multiple images were captured from different cameras located within a threshold distance of each other and were captured within a threshold amount of time of each other;

performing, by the device, the analysis of the individual, the equipment, or the activity based on a result of tracking the individual, the equipment, or the activity,

wherein performing the analysis of the individual, the equipment, or the object comprises:

determining a score for the individual based on the information related to tracking the individual,

the score indicating a measure of performance associated with the individual, and

the analysis identifies underperforming operations of the maintenance facility; and

performing, by the device, an action related to the individual, the equipment, or the activity based on the score,

the action to impact the operations of the maintenance facility.

9. The method of claim 8, where processing the image comprises:

processing the image to identify a hard hat in the image;

identifying the individual in the image after identifying the hard hat; and

where tracking the individual, the equipment, or the activity comprises:

tracking the individual through the multiple images after identifying the individual in the image.

10. The method of claims 8 or claim 9, where processing the image comprises:

processing the image to identify at least one of:

a license plate number on the equipment, or

a serial number on the equipment; and

where tracking the equipment comprises:

tracking the equipment through the multiple images based on the at least one of:

the license plate number, or

the serial number.

11. The method of any of claims 8 to 10, further comprising:

determining an amount of time needed to perform the activity after performing the analysis; and

where performing the action comprises:

performing the action after determining the amount of time needed to perform the activity.

12. The method of any of claims 8 to 11, where performing the analysis comprises:

analyzing movement of the individual through the maintenance facility or around the equipment; and

where performing the action comprises:

performing the action after performing the analysis of the movement of the individual through the maintenance facility or around the equipment.

13. The method of any of claims 8 to 12, where performing the analysis comprises:

analyzing utilization of a resource of the maintenance facility, the resource including a maintenance bay of the maintenance facility; and

where performing the action comprises:

performing the action after performing the analysis of the utilization of the resource.

14. A non-transitory computer-readable medium storing instructions, the instructions comprising:

one or more instructions that, when executed by one or more processors, cause the one or more processors to:

receive one or more images of a maintenance facility,

the one or more images showing:

one or more individuals within the maintenance facility,

one or more equipment within the maintenance facility, or

one or more activities being performed within the maintenance facility;

the one or more equipment, or the one or more activities,

where the one or more instructions, that cause the one or more processors to process the one or more images, cause the one or more processors to:

process the one or more images to identify a histogram of an article of clothing associated with the one or more individuals;

track the one or more individuals, the one or more equipment, or the one or more activities through the maintenance facility;

where the one or more instructions, that cause the one or more processors to track the one or more individuals, the one or more equipment, or more activities, cause the one or more processors to:

track the one or more individuals through the one or more images based on the histogram,

where the one or more images were captured from different cameras located within a threshold distance of each other and were captured within a threshold amount of time of each other;

perform one or more analyses of the one or more individuals, the one or more equipment, or the one or more activities,

where the one or more instructions, that cause the one or more processors to perform the one or more analysis, cause the one or more processors to:

determine one or more scores for the one or more individuals based on information related to tracking the one or more individuals, the one or more scores indicating one or more measures of performance associated with the one or more individuals, and

the one or more analyses to identify operations of the maintenance facility; and

perform one or more actions related to the one or more individuals, the one or more equipment, or the one or more activities based on the one or more scores, the one or more actions to impact the operations of the maintenance facility.

15. The non-transitory computer-readable medium of claim 14, where the one or more instructions, when executed by the one or more processors, further cause the one or more processors to:

identify one or more identifiers associated with the one or more equipment based on a result of processing the one or more images;

perform one or more lookups of the one or more identifiers to confirm identification of the one or more identifiers; and

where the one or more instructions, that cause the one or more processors to perform the one or more analyses, cause the one or more processors to:

perform the one or more analyses after performing the one or more lookups of the one or more identifiers.

16. The non-transitory computer-readable medium of claims 14 or claim 15, where the one or more instructions, that cause the one or more processors to perform the one or more analyses, cause the one or more processors to:

determine whether the one or more activities are satisfying one or more schedules; and

where the one or more instructions, that cause the one or more processors to perform the one or more actions, cause the one or more processors to:

perform the one or more actions after determining whether the one or more activities are satisfying the one or more schedules.

17. The non-transitory computer-readable medium of any of claims 14-16, where the one or more instructions, when executed by the one or more processors, further cause the one or more processors to:

uniquely identify each individual, of the one or more individuals, after processing the one or more images.

18. The non-transitory computer-readable medium of any of claims 14-17, where the one or more instructions, when executed by the one or more processors, further cause the one or more processors to:

identify an individual, of the one or more individuals, by identifying a hat worn by the individual.

19. The non-transitory computer-readable medium of any of claims 14-18, where:

the hat comprises a color histogram, and

the individual is identified by identifying the color histogram of the hat.

20. The non-transitory computer-readable medium of any of claims 15-19, where the one or more instructions, when executed by the one or more processors, further cause the one or more processors to:

map information identifying the one or more individuals, the one or more equipment, or the one or more activities to a map of the maintenance facility based on a result of tracking the one or more individuals, the one or more equipment, or the one or more activities; and

where the one or more instructions, that cause the one or more processors to perform the one or more analyses, cause the one or more processors to:

perform the one or more analyses after mapping the information to the map of the maintenance facility.