CLAIMS

WHAT IS CLAIMED IS:

1. An automated surveillance system, comprising:

an automation system configured to:

receive a plurality of data elements regarding a surveillance area from a plurality of sensors;

detect different types of objects or events from the plurality of data elements;

extract a set of features of the different types of objects or events;

identify an emergency situation based on the set of features and a set of rules;

assess a priority of the emergency situation based on a set of data elements associated with the emergency situation and a set of policies;

optimize a deployment of first responders by utilizing history analytics;

select a responder in response to the assessed priority and optimized deployment; and

dispatch the selected responder to an area related to the identified emergency situation.

2. The automated surveillance system of claim 1, further comprising:

one or more operations control centers connected to the automation system and configured to enable a user to perform one or more of:

monitoring the surveillance area based on the plurality of data elements;

configuring the automation system; or

evaluating and responding to the emergency situation.

3. The automated surveillance system of claim 1, wherein the plurality of sensors comprises one or more of video sensors, audio sensors, text sensors, weather sensors, traffic sensors, or building control sensors.

4. The automated surveillance system of claim 1, wherein the plurality of sensors comprises sensors equipped on mobile devices carried by first responders.

5. The automated surveillance system of claim 1, wherein the plurality of data elements comprises raw data and metadata, wherein a piece of metadata is data that provides

information about one or more pieces of raw data, wherein the metadata is collected by the plurality of sensors or derived from the raw data.

6. The automated surveillance system of claim 1, wherein the set of features comprises one or more of representations, structures, anomalies, behaviors, or patterns.

7. The automated surveillance system of claim 1, wherein, to identify the emergency situation based on the set of features and the set of rules, the automation system is configured to match the set of features with the set of rules.

8. The automated surveillance system of claim 1, wherein, to select the responder, the automation system is configured to determine a number of responders that is allocated from each type of responders based on at least one of the priority of the emergency situation or a type of the emergency situation.

9. The automated surveillance system of claim 1, wherein the automation system is further configured to assign a set of responders to the area based on a profile based on a set of pre-conditions, acquired ground conditions, and evaluation indexes.

10. The automated surveillance system of claim 9, wherein the automation system is further configured to assign different quantities of responders of different types or assets to each of a plurality of regions.

11. The automated surveillance system of claim 1, wherein the automation system is further configured to send alerts to the selected responder and public based on the identified emergency situation.

12. The automated surveillance system of claim 1, wherein the automation system is further configured to control accessibility from user to at least one component included in the automation system based on the set of rules and the priority.

13. The automated surveillance system of claim 1, wherein the automation system is further configured to manage a system resource based on the set of rules and the priority of the emergency situation.

14. The automated surveillance system of claim 1, wherein the automation system is further configured to manage storage duration indicating a term during which the plurality of data elements is stored in a storage medium based on the set of rules and the priority of the emergency situation and delete the plurality of data elements after the storage duration is elapsed.

15. The automated surveillance system of claim 1, wherein the automation system is further configured to control the plurality of sensors for tracking the emergency situation when the priority of the emergency situation is assessed as high priority.

16. The automated surveillance system of claim 15, wherein the automation system is further configured to send a mobile object to the emergency situation, the mobile object has a sensor for monitoring and tracking the emergency situation.

17. The automated surveillance system of claim 1, wherein the automation system is further configured to accept modification of the set of rules at any time while the automation system is in operation and update the set of rules in response to the accepting of the modification.

18. The automated surveillance system of claim 17, wherein the automation system is further configured to receive user input defining a suspicious trajectory through a graphical user interface, wherein the automation system is further configured to modify the set of rules based on the user input.

19. The automated surveillance system of claim 2, wherein the one or more operations control centers are further configured to provide a visualizing interface to show at least one of the number of identified emergency situations, a type of the identified emergency situations, the number of emergency situations of which priority is high, a priority of the

emergency situations and a map indicating a location and a density of the emergency situations.