

CLAIMS:

1. An entertainment system including an interactive component for an amusement park, wherein the interactive component comprises:

a detection device disposed within a housing and configured to read an identification tag via long range and short range radio communications;

an interactive sensor disposed within the housing and configured to detect physical interaction with a portion of the interactive component;

a control device communicatively coupled to the detection device and the interactive sensor, wherein the control device is configured to receive feedback from the detection device and the interactive sensor; and

an effect device configured to receive a signal from the control device and to generate an effect based on detection of the physical interaction with the portion of the interactive component; and

a transmitter configured to transmit data to the identification tag based on detection of the physical interaction with the portion of the interactive component while detecting the identification tag within a threshold distance of the interactive component.

2. The entertainment system of claim 1, wherein the interactive sensor comprises an accelerometer, or a piezoelectric sensor, or both, and wherein the interactive sensor is disposed proximate to the portion of the interactive component.

3. The entertainment system of claim 1, wherein the detection device comprises an ultra-high frequency (UHF) antenna configured to detect a UHF radio frequency identification (RFID) tag of the identification tag and a nearfield communication antenna configured to detect a nearfield communication RFID tag of the identification tag.

4. The system of claim 1, wherein the detection device comprises an ultra-high frequency transceiver, and wherein the ultra-high frequency transceiver and the control device are an integral unit.

5. The entertainment system of claim 1, wherein the effect device comprises a visual effect device, or an audio effect device, or both.

6. The entertainment system of claim 5, wherein the visual effect device comprises a monitor.

7. The entertainment system of claim 5, wherein the audio effect device comprises a speaker.

8. The entertainment system of claim 1, wherein the control device is configured to communicatively couple to a control system of the amusement park, wherein the control device is configured to award a point to an account associated with the identification tag upon detection of the interaction with the portion of the interactive component while detecting the identification tag within a threshold distance of the interactive component.

9. The entertainment system of claim 8, comprising the control system of the amusement park, wherein the control system of the amusement park is configured to display the point awarded on a display positioned in the amusement park.

10. The entertainment system of claim 1, wherein the interactive component is configured to be mounted to a structural support of the amusement park using a mounting component.

11. The entertainment system of claim 10, wherein the structural support comprises a height adjustment feature configured to move the interactive component based on user characteristics stored in a database and associated with the identification tag.

12. The entertainment system of claim 11, wherein the control device is configured to set an adjustment height of the height adjustment feature based on the user characteristics in response to the detection device detecting the identification tag.

13. A system, comprising:
an interactive component disposed in an environment of an amusement park, the interactive component comprising:
a detection device configured to communicate with a guest identification tag;
an interactive sensor configured to detect a physical proximity from and/or interaction with a portion of the interactive component;
a control device communicatively coupled to the detection device and the interactive sensor, configured to receive feedback from the detection device and the interactive sensor, and to award a point to a guest profile associated with the guest identification tag upon detection of the interaction with the portion of the interactive component while the guest identification tag is within a threshold proximity; and
an effect device configured to receive a signal from the control device to generate an effect upon detection of the interaction with the portion of the interactive component;
a display disposed in the environment of the amusement park; and
a control system of the amusement park communicatively coupled to the control device of the interactive component, wherein the control system is configured to send one or more signals to the display to display information based on the point awarded to the guest profile.

14. The system of claim 13, wherein the display is configured to show top scores of a predetermined number of guests of the amusement park.

15. The system of claim 13, wherein the interactive sensor comprises an accelerometer, or a piezoelectric sensor, or both, and wherein the interactive sensor is disposed proximate to the portion of the interactive component.

16. The system of claim 13, wherein the effect generated by the effect device is personalized to the guest profile based on preferences identified in the guest profile.

17. A method, comprising:
identifying, using a detection device, a guest device approaching an interactive component disposed in an environment of an amusement park;
detecting, using an interactive sensor, interaction with the interactive component associated with the identified guest device while detecting, using the detection device, a presence of the guest device within a threshold distance relative to a point of the interactive component; and
generating, using an effect device, an effect based on the detected interaction with the interactive component associated with the identified guest device while detecting the presence of the identified guest device within the threshold distance relative to the point of the interactive component.

18. The method of claim 17, comprising setting an adjustment height of the interactive component using a height adjustment feature based on user characteristics determined from a guest profile associated with the guest device.

19. The method of claim 18, wherein setting the adjustment height of the interactive component comprises adjusting a height of a telescoping beam coupled to a mounting device of the interactive component.

20. The method of claim 17, comprising:

detecting, using the detection device or a proximity sensor, a proximity of the guest device to the point of the interactive component; and

actuating, using the effect device, an additional effect indicating how to interact with the interactive component when the guest device is within a predetermined distance from the point of the interactive component, wherein the predetermined distance is larger than the threshold distance.