CLAIMS:

~~1.~~ 1. An amusement attraction that provides a reactive game experience to a guest, the amusement attraction having a robot control system that comprises:

a show robot; and

a robot controller communicatively coupled to the show robot, wherein the robot controller is configured to:

instruct the show robot to execute a baseline performance, which is predetermined and stored within the robot controller;

receive game input from an input device;

instruct the show robot to interrupt the baseline performance by executing a reactive performance comprising a sequence of reactive actions that is responsive to the game input; ~~and~~

instruct the show robot to execute a connective performance that links an end of the sequence of the reactive actions back to the baseline performance~~.~~; and

a media control system that comprises at least one projector and a media controller communicatively coupled to the at least one projector, wherein the media controller is configured to:

instruct the at least one projector to projection map a character appearance onto a body of the show robot during the baseline performance,

receive position information, velocity information, acceleration information, or a combination thereof associated with the show robot executing the reactive performance from the robot controller, and

adjust a media projection target of the at least one projector during the reactive performance in response to receiving the position information, the velocity information, the acceleration information, or the combination thereof.

~~2.~~ 2. The amusement attraction of claim 1, wherein the connective performance comprises a sequence of connective actions that transitions the show robot back to an interrupted action of the baseline performance.

~~3.~~ 3. The amusement attraction of claim 1, wherein the connective performance comprises a sequence of connective actions that transitions the show robot to a portion of the baseline performance that is a threshold time after an interrupted action of the baseline performance.

~~4.~~ 4. The amusement attraction of ~~claim~~ claim 1, wherein the robot controller is configured to generate the connective performance before instructing the show robot to interrupt the baseline performance.

~~5.~~ 5. The amusement attraction of ~~claim~~ claim 1, wherein the reactive actions of the sequence comprise positioning of the show robot, motions of the show robot, or a combination thereof that are dynamically generated based on parameters of the game input.

~~6.~~ 6. The amusement attraction of ~~claim~~ claim 5, wherein the parameters of the game input comprise a type of the game input, a type of the input device that provides the game input, a target portion of the show robot marked by the game input, or a combination thereof.

~~7.~~ 7. The amusement attraction of ~~claim~~ claim 1, wherein the show robot comprises a body and at least one actuator configured to move a portion of the body during the baseline performance, the reactive performance, the connective performance, or a combination thereof based on instructions from the robot controller.

~~8.~~ 8. The amusement attraction of ~~claim 1, comprising a media control system that comprises:~~

~~at least one projector; and~~

~~a media controller communicatively coupled to the at least one projector, wherein the media controller is configured to instruct the at least one projector to projection map a character appearance onto a body of the show robot during the baseline performance.~~

~~9. The amusement attraction of claim 8, wherein the media controller is configured to:~~

~~receive position information, velocity information, acceleration information, or a combination thereof associated with the show robot executing the reactive performance from the robot controller; and~~

~~adjust a media projection target of the at least one projector during the reactive performance in response to receiving the position information, the velocity information, the acceleration information, or the combination thereof.~~

~~10.~~ ~~The amusement attraction of~~ claim 1, comprising:

a ride vehicle comprising a vehicle body, wherein the input device is coupled to the vehicle body; and

a game controller communicatively coupled to the input device and the robot controller, wherein the game controller is configured to receive the game input from the input device and provide the game input to the robot controller.

~~11.~~ 9. The amusement attraction of claim 1, comprising the input device, wherein the input device is communicatively coupled to the robot controller, wherein the input device comprises a virtual projectile launcher, and wherein the game input provided to the robot controller is indicative of the guest launching a virtual projectile object at a target portion of the show robot.

~~12.~~ 10. The amusement attraction of claim ~~11~~9, comprising a wearable visualization device communicatively coupled to the input device, wherein the wearable visualization device is configured to render the virtual projectile object traveling from the input device to the target portion within a real world environment viewable by the guest.

~~13.~~ 11. An amusement ride for providing a reactive game experience, the amusement ride comprising:

a ride vehicle configured to transport a guest to a position for viewing a show set of the amusement ride, wherein the ride vehicle comprises an input device and a game controller communicatively coupled to the input device to receive game input therefrom;

a show robot disposed within the show set; ~~and~~

a robot controller communicatively coupled to the show robot and the game controller, wherein the robot controller is configured to:

instruct the show robot to initiate a baseline performance~~;~~,

receive the game input from the game controller after the show robot initiates the baseline performance~~;~~,

generate a reactive and connective performance that causes the show robot to deviate from the baseline performance, perform a sequence of reactive actions that is responsive to the game input, and return to the baseline performance~~,~~, and

instruct the show robot to execute the reactive and connective performance~~.~~; and

a media control system that comprises at least one projector and a media controller communicatively coupled to the at least one projector, wherein the media controller is configured to:

instruct the at least one projector to projection map onto a body of the show robot during the baseline performance,

receive position information, velocity information, acceleration information, or a combination thereof associated with the show robot executing the reactive and connective performance from the robot controller, and

adjust a media projection target of the at least one projector during the reactive and connective performance in response to receiving the position information, the velocity information, the acceleration information, or the combination thereof.

~~14.~~ 12. The amusement ride of ~~claim 13~~11, wherein the baseline performance includes a sequence of actions, and wherein the reactive and connective performance interrupts the sequence of the actions with the sequence of the reactive actions.

~~15.~~ 13. The amusement ride of claim ~~13~~11, wherein the reactive and connective performance comprises a reactive performance that is individually generated based on the game input and a connective performance that links an end of the reactive performance back to the baseline performance.

~~16.~~ 14. The amusement ride of ~~claim 13~~11, wherein the game controller is configured to provide the game input to ~~a~~the media control system comprising ~~a~~the media controller and the at least one projector configured to projection map a character appearance onto the show robot, and

wherein the media controller is configured to instruct the at least one projector to adjust the character appearance in response to receiving the game input.

~~17.~~ 15. A method of controlling a robot ~~control system~~and media to provide a reactive game experience within an amusement ride, the method comprising:

instructing, via a robot controller ~~of the robot control system, a show~~the robot to execute a baseline performance in response to initiation of a game cycle associated with a ride vehicle of the amusement ride;

receiving, via the robot controller, game input from a game controller associated with the ride vehicle, wherein the game input corresponds to activation of an input device of the ride vehicle;

generating, via the robot controller, a reactive performance comprising a sequence of reactive actions in response to receiving the game input;

generating, via the robot controller, a connective performance that links an end of the sequence of the reactive actions back to the baseline performance; ~~and~~

instructing, via the robot controller, the ~~show~~ robot to interrupt the baseline performance by executing the reactive performance followed by the connective performance~~.~~;

~~The method~~instructing, via a media controller, at least one projector to projection map a character appearance onto the robot during the baseline performance,

receiving, via the media controller, position information, velocity information, acceleration information, or a combination thereof associated with the robot executing the reactive performance or the connective performance from the robot controller; and

adjusting, via the media controller, a media projection target of the at least one projector during the reactive performance or the connective performance in response to receiving the position information, the velocity information, the acceleration information, or the combination thereof.

~~18.~~ 16. The method of claim ~~17~~15, wherein the reactive performance and the connective performance are generated simultaneously.

~~19.~~ 17. The method of claim ~~17~~15, comprising:

receiving, via the robot controller, a stop signal from the game controller in response to a threshold time of the game cycle elapsing or in response to a game condition being satisfied; and instructing, via the robot controller, the ~~show~~ robot to execute an end of scene performance to indicate conclusion of the game cycle in response to the stop signal.

~~20.~~ 18. The method of ~~claim 17~~15, comprising transmitting, via the game controller, the game input to ~~a~~the media ~~control system comprising a~~controller, wherein the media controller controls the at least one projector, ~~wherein~~based on the ~~projector provides~~game input, to project a reactive character appearance corresponding to the game input ~~to~~onto an outer surface of the ~~show~~ robot.