CLAIMS:

1. An amusement park system, comprising:

a modular attraction system, comprising:

a ride vehicle having seats to accommodate passengers; and

an on-board system integrated with the ride vehicle and comprising a plurality of game systems connected via a network, wherein each game system of the plurality of game systems is configured to provide an augmented reality (AR) experience, or a virtual reality (VR) experience, or both, via a respective visual experience generator device, ~~and~~ wherein the AR experience, or the VR experience, or both, is provided within a game shared between the plurality of game systems~~;~~, wherein the on-board system is configured to receive user inputs from the passengers to, based on the user inputs, cause adjustment of AR events and/or VR events occurring during the game shared between the plurality of game systems,

wherein the plurality of game systems is integrated into the ride vehicle, and ~~the~~wherein individual game systems of the plurality of game systems are connected via the network to one another in a manner that allows for ready removal of at least one game system of the plurality of game systems from the ride vehicle and replacement of the at least one game system with another game system without affecting operation of remaining game systems of the plurality of game systems.

2. The amusement park system of claim 1, wherein the on-board system comprises an on-board network switch communicatively coupled to each game system of the plurality of game systems separately.

3. The amusement park system of claim 2, wherein the on-board system comprises an on-board game server communicatively coupled to the plurality of game systems via the on-board network switch, wherein the on-board game server is configured to receive ~~passenger input data,~~the user inputs and to distribute the ~~passenger input data~~user inputs via the on-board network switch to the plurality of game systems.

4. The amusement park system of claim 3, wherein the respective visual experience generator device is one of a plurality of visual experience generator devices ~~comprise~~comprising head mounted displays (HMDs), the on-board system comprises user interfaces and a tracking system configured to track motion, orientation, or both, of the HMDs, and wherein the user interfaces and the tracking system are configured to provide the ~~passenger input data~~user inputs to the on-board game server.

5. The amusement park system of claim 4, wherein the on-board system comprises a vehicle show supervisor (VSS), and wherein the on-board game server is configured to coordinate communication between the tracking system, the plurality of game systems, and the VSS, via the on-board network switch.

6. The amusement park system of claim 5, wherein the on-board game server is configured to communicate with the plurality of game systems and the VSS according to an information hierarchy in which a first type of information is communicated with a higher priority than other types of information.

7. The amusement park system of claim 3, wherein each game system of the plurality of game systems of the on-board system comprises:

a gaming computer communicatively coupled to the on-board game server via the on-board network switch and configured to render graphics for the AR experience, or the VR experience, or both, based on the ~~passenger input data~~user inputs received from the on-board game server; and

the respective visual experience generator device tethered to the ride vehicle and communicatively coupled to the gaming computer, wherein the respective visual experience generator device is configured to display the rendered graphics on one or more display surfaces.

8. The amusement park system of claim 7, wherein each game system of the plurality of game systems comprises an identification recognition system communicatively coupled to the gaming computer and configured to retrieve identifying information relating to a passenger occupying a seat corresponding to ~~the~~a corresponding game system, and wherein the gaming computer is configured to render the graphics in accordance with the identifying information.

~~computer is configured to render the graphics in accordance with the received identifying information.~~

9. The amusement park system of claim 1, wherein the modular attraction system comprises an off-board system in communication with the on-board system via the network, wherein the off-board system is configured to provide off-board show effects in coordination with the game shared between the plurality of game systems.

10. The amusement park system of claim 9, wherein the off-board system comprises: one or more off-board game systems each comprising an off-board game computer; a ride supervisor system (RSS) configured to control show effect devices positioned off of the ride vehicle;

an off-board network switch communicatively coupled to each of the one or more off-board game systems separately and to the RSS; and

an off-board game server communicatively coupled to the one or more off-board game systems and to the RSS via the off-board network switch and configured to coordinate communication between the one or more off-board game systems and the RSS.

11. The amusement park system of claim 10, wherein the off-board system comprises one or more media systems disposed off of the ride vehicle and communicatively coupled to the one or more off-board game systems, wherein an off-board gaming computer of each of the one or more off-board game systems is configured to generate media for display by a respective media system of the one or more media systems in coordination with the game shared between the plurality of game systems.

12. The amusement park system of claim 1, wherein the ride vehicle is configured to travel along a ride path.

13. A modular amusement park ride vehicle, comprising:

a body having a passenger compartment and seats to accommodate passengers;

a plurality of on-board game systems, wherein each on-board game system of the plurality of on-board game systems is associated with a respective seat to allow each passenger of the modular amusement park ride vehicle to participate in an augmented reality (AR) and/or virtual reality (VR) game shared between the plurality of on-board game systems, wherein each on-board game system of the plurality of on-board game systems comprises a gaming computer configured to render AR and/or VR graphics, and a head-mounted display (HMD) in communication with the gaming computer and configured to display the AR and/or VR graphics;

~~an on-board game server configured to coordinate communication with the on-board game systems via an on-board network switch individually connected to the on-board game systems of the plurality of on-board game systems; and~~

a vehicle show supervisor (VSS) ~~communicatively coupled to the on-board game server and~~ configured to receive ~~game inputs,~~ from the passengers of the modular amusement park ride vehicle, game inputs relating to the AR and/or VR game ~~and to relay the received~~ shared between the plurality of on-board game systems; and an on-board game server communicatively coupled to the VSS and each on-board game system of the plurality of on-board game systems via an on-board network switch, wherein the on-board game server is configured to receive the game inputs ~~to the on-board~~from the VSS and to coordinate communication of the game ~~server via the~~ inputs to the plurality of on-board game systems such that each of the game inputs received from the passengers is configured to cause an adjustment in the AR and/or VR game shared between the plurality of on-board ~~network switch~~game systems.

14. The modular amusement park ride vehicle of claim 13, comprising an access panel formed into a surface of the body and configured to allow ready access to at least one on-

board game system of the plurality of on-board game systems, or the on-board game server, or the VSS.

15. The modular amusement park ride vehicle of claim 13, comprising user interfaces individually communicatively coupled to the VSS, wherein each seat is associated with at least one user interface to allow provision of the game inputs to affect the AR and/or VR game.

16. The modular amusement park ride vehicle of claim 13, wherein each HMD comprises an integrated tracking sensor communicatively coupled to a tracking system, and wherein the tracking system is configured to produce tracking data relating to motion and orientation of the HMD, and wherein the on-board game server is configured to distribute the tracking data to at least an on-board game system of the plurality of on-board game systems corresponding to the respective seat to which the HMD is associated.

17. The modular amusement park ride vehicle of claim 13, comprising a networking device communicatively coupled to the on-board network switch to allow the on-board network switch to access a network shared between the modular amusement park ride vehicle and other networked devices that are located off-board the modular amusement park ride vehicle.

18. An amusement park attraction system, comprising:

an on-board system integrated with a ride vehicle, wherein the on-board system has a visual experience generator device for each seat in the ride vehicle, ~~and~~ wherein the on-board system is configured to provide an augmented reality (AR) experience, virtual reality (VR) experience, or both, within a shared game via at least the visual experience generator devices~~; and~~, and wherein the on-board system is configured to receive user inputs from a plurality of passengers of the ride vehicle to cause adjustment of AR events and/or VR events occurring during the shared game based on the user inputs from the plurality of passengers; and

an off-board system communicatively coupled to the on-board system via a network and having off-board show devices positioned off of the ride vehicle, wherein the off-board system comprises an off-board game server communicatively coupled to the off-board show devices and configured to control the off-board show devices based on the adjustment of the AR events and/or the VR events occurring during the shared game to coordinate operation of the off-board show devices with ~~AR or VR events occurring during~~ the shared game.

19. The amusement park attraction system of claim 18, wherein the on-board system is integrated with the ride vehicle such that the on-board system is configured to move with the ride vehicle along a ride path during a ride in an amusement park.

20. The amusement park attraction system of claim ~~17~~18, wherein the off-board show devices comprise a light system, an ~~animatronic~~animated prop, robotic device, a display system, a sound system, or a combination thereof.