What is claimed is : ~~CLAIMS~~

1. A method in a computing device having a display screen, comprising:

receiving game data generated by a video game, the game data including game video in the form of a video stream containing game video frames;

displaying, on the display screen, the game video to represent the video game to a user playing the video game at the computing device;

identifying at least one feature of the video game at least in the game data;

selecting a user interface (UI) control configuration associated with the identified at least one feature from a plurality of UI control configurations for the video game, each of the UI control configurations defining a corresponding graphical overlay to the video game configured to be interacted with in a corresponding live game scenario of the video game; and

implementing, on the video game in the display screen, the graphical overlay corresponding to the selected UI control configuration.

2. The method of claim 1, wherein said identifying comprises:

identifying a feature of the video game in at least one of:

a game video frame of the game data,

game audio data of the game data,

a stream of input events provided to the video game, or

usage of hardware of the computing device.

3. The method of claim 1, wherein the at least one feature includes an object, and said identifying further comprising:

analyzing a predetermined screen region of the display screen for an image of the object; and

determining a confidence score associated with the object indicating a probability of the image of the object being contained in the predetermined screen region.

4. The method of claim 3, wherein said analyzing comprises:

applying a portion of a game video frame of the video stream containing the image of the object to a trained machine learning model to generate the confidence score.

5. The method of claim 4, further comprising:

executing the video game to generate training game data that includes a training video stream;

receiving training indications of objects displayed in game video frames of the training video stream; and

applying the training video stream and the training indications to a machine learning algorithm to generate the trained machine learning model.

6. The method of claim 1, wherein the display screen is a touch screen, the method further comprising:

tuning control associated with the selected UI control configuration corresponding to the graphical overlay for the touch screen, said tuning comprising:

linearizing a game input response curve associated with a physical game controller input device,

tuning the linearized game input response curve for a touch input of the graphical overlay, and

associating the tuned game input response curve with the touch input of the graphical overlay.

7. The method of claim 1, wherein the game data includes a game video frame that includes an image rendered by the computing device and composited into the game video frame.

8. A system implemented in a computing device, comprising:

a video game streaming client comprising:

a game engine configured to

receive game data generated by a video game, the game data including game video in the form of a video stream containing game video frames; and

display the game video on the display screen to represent the video game to a user playing the video game at the computing device; and
a control configuration determiner comprising:

a feature identifier configured to

identify at least one feature of the video game at least in the game data; and

a control configuration selector configured to:

select a user interface (UI) control configuration associated with the identified at least one feature from a plurality of UI control configurations for the video game, each of the UI control configurations defining a corresponding graphical overlay to the video game configured to be interacted with in a corresponding live game scenario of the video game, and

implement the graphical overlay corresponding to the selected UI control configuration on the video game in the display screen.

9. The system of claim 8, wherein the feature identifier is further configured to:

identify a feature of the video game in at least one of:

a game video frame of the game data,

game audio data of the game data,

a stream of input events provided to the video game, or

usage of hardware of the computing device.

10. The system of claim 8, wherein the at least one feature includes an object, and the feature identifier is further configured to:

analyze a predetermined screen region of the display screen for an image of the object; and

determine a confidence score associated with the object indicating a probability of the image of the object being contained in the predetermined screen region.

11. The system of claim 8, wherein the feature identifier is configured to:

apply a portion of a game video frame of the video stream containing the image of the object to a trained machine learning model to generate the confidence score.

12. The system of claim 8, wherein the display screen is a touch screen, and the video game streaming client further comprises:

a game input response tuner configured to tune control associated with the selected UI control configuration corresponding to the graphical overlay for the touch screen, including being configured to:

linearize a game input response curve associated with a physical game controller input device,

tune the linearized game input response curve for a touch input of the graphical overlay, and

associate the tuned game input response curve with the touch input of the graphical overlay.

13. The system of claim 8, wherein the game data includes a game video frame, and the game engine includes a game video modifier configured to:

render an image; and

composite the image into the game video frame.

14. A computer-readable medium having program code recorded thereon that when executed by at least one processor causes the at least one processor to perform a ~~any of the~~ method, the method comprising : ~~s of claims 1-7.~~

receiving game data generated by a video game, the game data including game video in the form of a video stream containing game video frames;

displaying, on a display screen, the game video to represent the video game to a user playing the video game at the computing device;

identifying at least one feature of the video game at least in the game data;

selecting a user interface (UI) control configuration associated with the identified at least one feature from a plurality of UI control configurations for the video game, each of the UI control configurations defining a corresponding graphical overlay to the video game configured to be interacted with in a corresponding live game scenario of the video game; and

implementing, on the video game in the display screen, the graphical overlay corresponding to the selected UI control configuration.

15. The computer-readable medium of claim 14, wherein said identifying comprises :

identifying a feature of the video game in at least one of :

a game video frame of the game data,

game audio data of the game data,

a stream of input events provided to the video game, or usage of

hardware of the computing device.

16. The computer-readable medium of claim 14, wherein the at least one feature includes an object, and said identifying further comprising :

analyzing a predetermined screen region of the display screen for an image of the object; and

receiving a confidence score associated with the object indicating a probability of the image of the object being contained in the predetermined screen region.

17. The computer-readable medium of claim 16, wherein said analyzing comprises :

applying a portion of a game video frame of the video stream containing the image of the object to a trained machine learning model to generate the confidence score.

18. The computer-readable medium of claim 17, wherein the method further comprises :

executing the video game to generate training game data that includes a training video stream;

receiving training indications of objects displayed in game video frames of the training video stream; and

applying the training video stream and the training indication to a machine learning algorithm to generate the trained machine learning model.

19. The computer-readable medium of claim 14, wherein the display screen is a touch screen, and the method further comprises :

tuning control associated with the selected UI control configuration corresponding to the graphical overlay for the touch screen, said tuning comprising :

linearizing a game input response curve associated with a physical game controller input device,

tuning the linearized game input response curve for a touch input of the graphical overlay, and

associating the tuned game input response curve with the touch input of the graphical overlay.

20. The computer-readable medium of claim 14, wherein the game data includes a game video frame that includes an image rendered by the computing device and composited into the game video frame.