



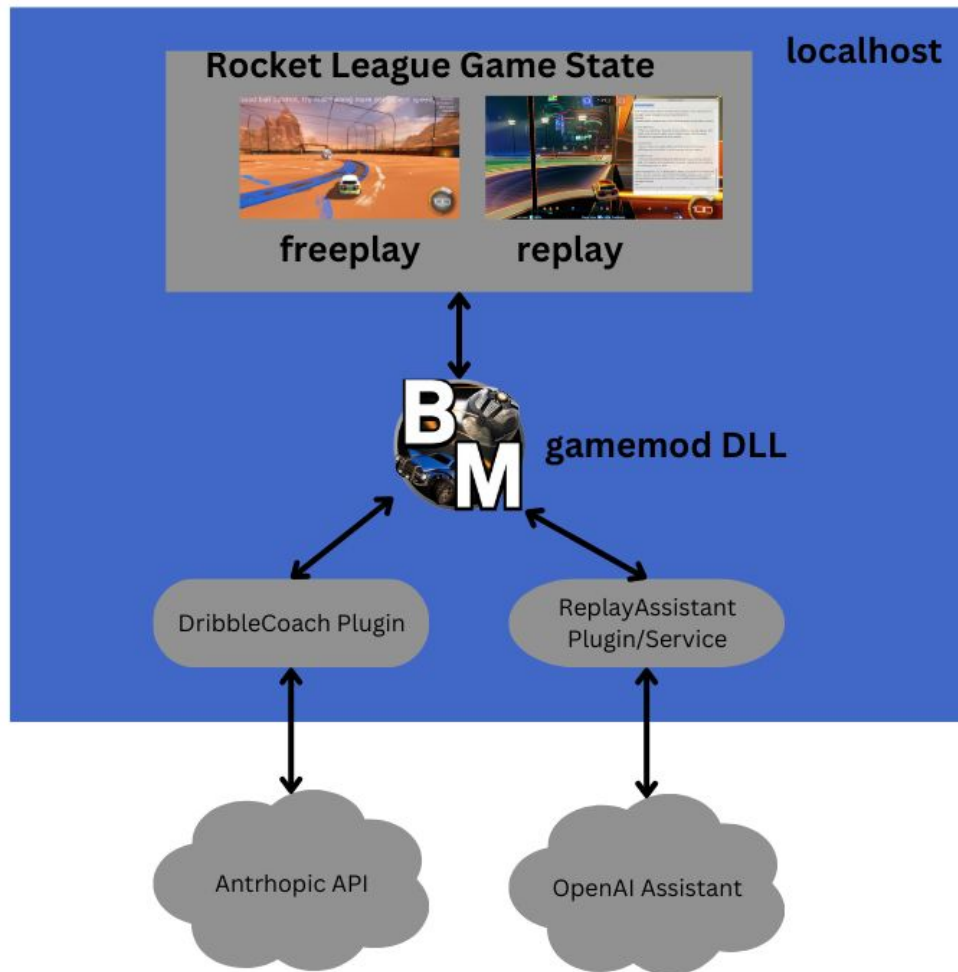
Rocket League AI Coach & Assistant

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Rocket League

a fast-paced game of 'rocket cars playing soccer' that demands quick reflexes, precise control, and strategic team play
1v1, 2v2, 3v3, 4v4 and various other game modes.



This project explores two primary approaches to integrating game mechanics with AI:

- **Mechanics Feedback:** Simple textual feedback on dribble mechanics during freeplay.
- **Replay Prompt:** Assistant prompt on replay data overview discussing strategy, rotations, game play.

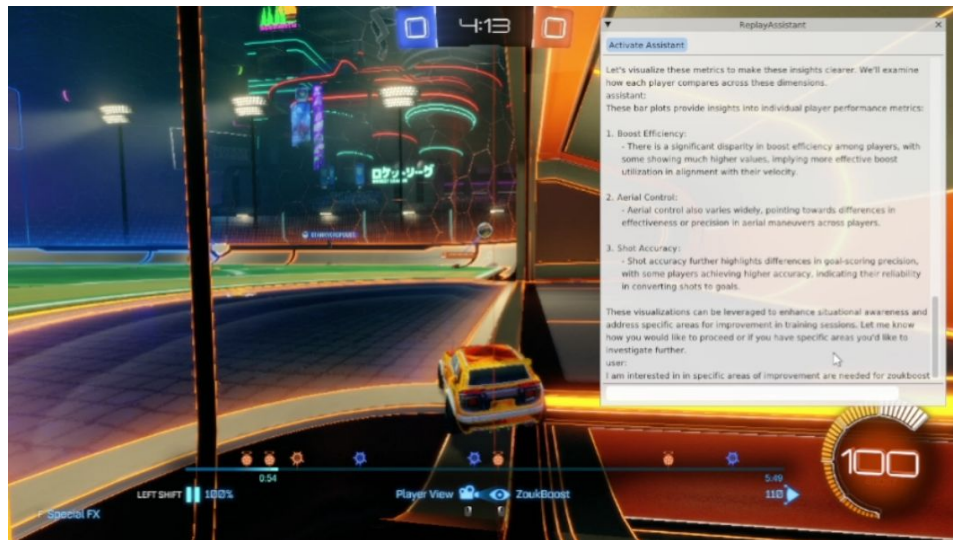
DribbleCoach: Mechanics Feedback

- Description:
 - Identifies and tracks ground and air dribbling.
 - Offers simple suggestions
- Needs:
 - Improved air dribbling tracking.
 - Flick mechanic feedback.



ReplayAssistant: Replay Prompt

- Description:
 - a. OpenAI assistant prompt available on the current replay data
- Todo:
 - a. Fix image rendering bugs
 - b. Live annotations, time controls



ReplayAssistant: OpenAI Assistants Playground

<https://platform.openai.com/playground/assistants>

The screenshot displays the OpenAI Assistants Playground interface. On the left sidebar, the 'Assistants' tab is selected. The main panel shows an assistant named 'Rocket League Replay Coach' with the ID 'asst_r0hgPV70jyP4cFhG8DxK7bD'. The system instructions state: 'You are a world-class Rocket League team coach. You analyze data present in .csv files, understand trends, create data visualizations relevant to those trends, and share brief text summaries of observed trends. Your insights'. The model is set to 'gpt-4o'. Below the model, there are options for 'File search' and 'Code interpreter', both of which are currently disabled. The right panel shows a thread titled 'THREAD thread_WTGKgyyptxMxM9KSKITRIH' with 4088 tokens. It contains a visualization of a goal sequence, showing a scatter plot of player positions and a goal frame highlight. The text below the visualization reads: 'Here are the visualizations for each goal sequence from contact to scoring the goal:'. A list of bullet points explains the visualizations: 'Each plot represents a sequence of movement patterns involving players and the ball over a set of frames leading to a goal.', 'Scatter points: Represent players and their movement. Differentiated by team and player name, showing their positions on the field.', and 'Goal Frame Highlight: The final frames in each sequence illustrate the build-up and execution of the goal, providing insights into the positioning and involvement of players.' At the bottom, there is a text input field 'Enter your message...' and a 'Run Chat' button.



Live Demonstration



Thank you!

Source code for presentation

<https://github.com/scottleedavis/ai-portland-rocketleague/>

Acknowledgements

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