Gradient Descent Visualization

Learning Insights:

Here's a learning blurb that explains the core concept of the learning rate in gradient descent and highlights the key insights from the visualization: "When it comes to gradient descent, the learning rate is like the speed at which you're driving towards the optimal solution. If you're going too fast, you might overshoot the mark and end up in a local minimum. But if you're going too slow, you might never reach the optimal solution. The visualization shows us that there's an optimal learning rate that balances speed and accuracy, allowing the algorithm to converge smoothly to the global minimum. The key takeaway is that a high learning rate can lead to rapid convergence, but also oscillations and overshooting, while a low learning rate can lead to slow convergence, but convergence to the global minimum. By finding the right learning rate, you can ensure that your algorithm converges to the optimal solution, and that's what matters most."