

A scatter plot illustrating a linear decision boundary. The x-axis ranges from -2 to 5, and the y-axis ranges from 0 to 4. The background is filled with a color gradient that transitions from blue on the left to red on the right, passing through purple and orange. A solid black line, representing the decision boundary, runs diagonally from the bottom-left to the top-right. There are two main clusters of data points: a blue cluster in the upper-left region and a red cluster in the lower-right region. Several points are highlighted with white circles and black outlines, including one blue point near the top-left and one red point near the bottom-right, both of which are close to the decision boundary.

