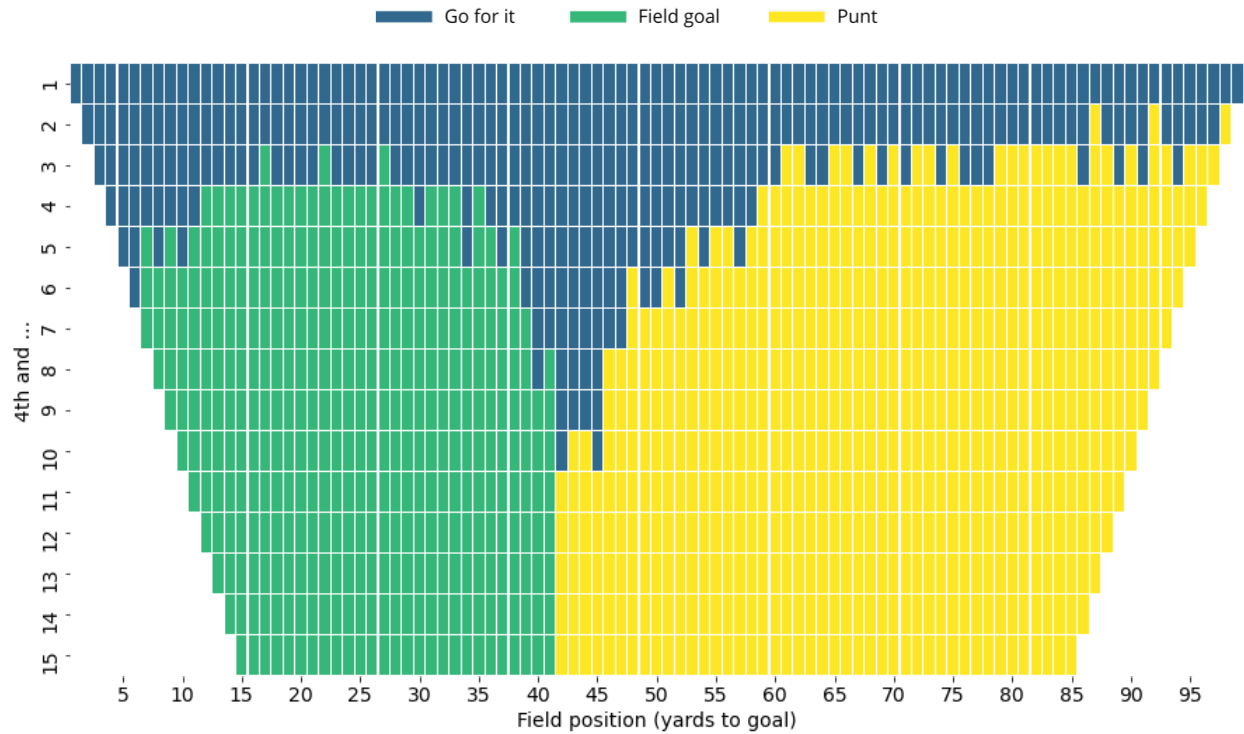


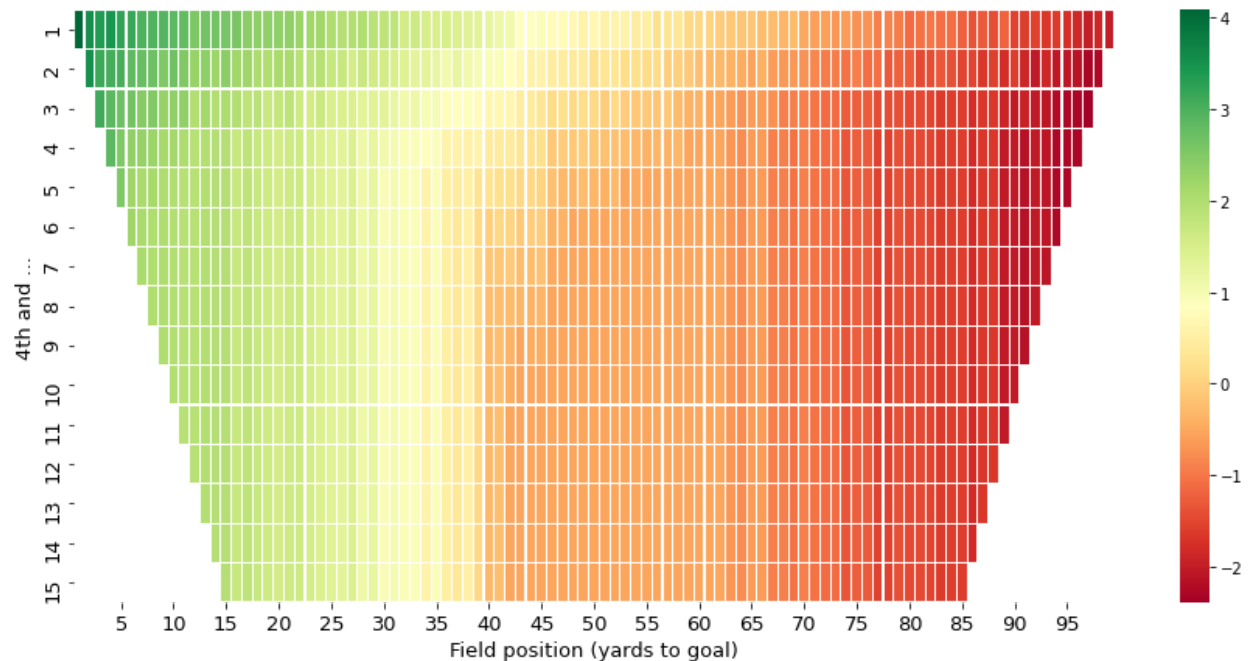
Fourth Down Model

Janet Li

Recommended Decision



Maximum Expected Value (Points) of First Down



User Guide

The model shows the best decision (in terms of points scored), given the current field position and yards to go until first down, as well as the expected points gained or lost by making that decision.

If it's 4th and 1, no matter where you are on the field, you should always go for it. On the flip side, if you are further than 15 yards from a first down, then you should never go for it—either kick a field goal or punt, depending on your field position. If you are less than 42 yards away from the end zone, then kick a field goal. Otherwise, you should punt.

Finally, if you are within 15 yards of a first down, find the square that corresponds to your current field position and yards to go until first down in the Recommended Decision graph. Then, find the decision that corresponds to the color of that square.

For example, suppose it's 4th and 5 at the 30 yard line. The corresponding square in the decision graph is green, which means that the best decision is to kick a field goal. The corresponding square in the expected points graph is yellow, which means that the expected value of kicking a field goal is approximately a 1 point gain. This example is depicted in the diagrams below, on a smaller section of the model:

