

Heatmap visualization showing the Mean Accuracy Score (Y-axis, ranging from 0.400 to 0.600) as a function of the Number of Estimators ($n_{\text{estimators}}$, X-axis, ranging from 10 to 200) and the Max Depth (max_depth , Z-axis, ranging from 1 to 20). The color scale indicates the Mean Accuracy Score, with darker colors representing lower scores and lighter colors representing higher scores. The plot shows that accuracy generally increases with the number of estimators and max depth, with the highest accuracy (yellow) achieved at $n_{\text{estimators}} = 100$ and $max_depth = 10$.

