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**Best Model Identification**

Based on the experiment results, the best performing model is **Run 7**, which has the following configuration:

* max\_depth: 10
* n\_estimators: 300
* min\_samples\_split: 10

This model achieved:

* RMSE: 61,867.21
* MAE: 11,593.31
* R2: 0.0092

This is the best model because it has:

1. The highest R2 score (0.0092) - the only positive R2 value among all models
2. The lowest RMSE (61,867.21) - indicating the smallest prediction errors

The best model (Run 7) represents an optimal balance between complexity and generalization for this dataset. Its moderate tree depth (10), adequate ensemble size (300), and more aggressive pruning strategy (min\_samples\_split=10) provide the best performance among the tested configurations. While the overall predictive power is modest, it offers a foundation for further refinement and provides valuable insights into the challenge of predicting F1 lap times.