BOOKING\_CLICKED\_COMBINED

| **feature** | **importance** |
| --- | --- |
| **0** | srch\_id | 0.037647 |
| **1** | site\_id | 0.007685 |
| **2** | visitor\_location\_country\_id | 0.010449 |
| **3** | prop\_country\_id | 0.008070 |
| **4** | prop\_id | 0.022529 |
| **5** | prop\_starrating | 0.003932 |
| **6** | prop\_review\_score | 0.005232 |
| **7** | prop\_brand\_bool | 0.002848 |
| **8** | prop\_location\_score1 | 0.013602 |
| **9** | prop\_location\_score2 | 0.020729 |
| **10** | prop\_log\_historical\_price | 0.024787 |
| **11** | price\_usd | 0.028016 |
| **12** | promotion\_flag | 0.002937 |
| **13** | srch\_destination\_id | 0.020723 |
| **14** | srch\_length\_of\_stay | 0.014780 |
| **15** | srch\_booking\_window | 0.030587 |
| **16** | srch\_adults\_count | 0.011180 |
| **17** | srch\_children\_count | 0.009045 |
| **18** | srch\_room\_count | 0.004546 |
| **19** | srch\_saturday\_night\_bool | 0.005680 |
| **20** | srch\_query\_affinity\_score | 0.006023 |
| **21** | orig\_destination\_distance | 0.031758 |
| **22** | random\_bool | 0.007832 |
| **23** | star\_diff\_bool | 0.000916 |
| **24** | price\_diff\_bool | 0.000629 |
| **25** | visitor\_hist\_starrating\_filled | 0.009109 |
| **26** | visitor\_hist\_adr\_usd\_filled | 0.002703 |
| **27** | willingness\_to\_pay | 0.001451 |
| **28** | star\_diff\_filled | 0.011932 |
| **29** | price\_diff\_filled | 0.027917 |
| **30** | month | 0.017692 |
| **31** | prop\_review\_score\_norm\_srch\_destination\_id | 0.020052 |
| **32** | price\_usd\_norm\_srch\_id | 0.042218 |
| **33** | srch\_query\_affinity\_bins | 0.002864 |
| **34** | star\_diff\_bins | 0.001728 |
| **35** | price\_diff\_bins | 0.009574 |
| **36** | price\_usd\_norm\_srch\_destination\_id | 0.033944 |
| **37** | prop\_location\_score1\_norm\_srch\_destination\_id | 0.019817 |
| **38** | prop\_location\_score2\_norm\_srch\_destination\_id | 0.020812 |
| **39** | prop\_review\_score\_norm\_srch\_id | 0.033348 |
| **40** | prop\_location\_score1\_norm\_srch\_id | 0.033650 |
| **41** | prop\_location\_score2\_norm\_srch\_id | 0.036668 |
| **42** | prop\_desirability\_incomplete | 0.045017 |
| **43** | position\_estimate | 0.031593 |
| **44** | prop\_location\_score\_combined | 0.020142 |
| **45** | prop\_location\_score\_combined\_norm\_srch\_destina... | 0.020684 |
| **46** | prop\_location\_score\_combined\_norm\_srch\_id | 0.033291 |
| **47** | price\_usd\_norm\_site\_id | 0.028411 |
| **48** | prop\_location\_score1\_norm\_site\_id | 0.018080 |
| **49** | prop\_location\_score2\_norm\_site\_id | 0.022694 |
| **50** | prop\_location\_score\_combined\_norm\_site\_id | 0.022487 |
| **51** | prop\_review\_score\_norm\_site\_id | 0.012665 |
| **52** | avg\_prop\_price\_usd | 0.022093 |
| **53** | avg\_prop\_location\_score1 | 0.013610 |
| **54** | avg\_prop\_location\_score2 | 0.021812 |
| **55** | avg\_prop\_location\_score\_combined | 0.020609 |
| **56** | avg\_prop\_review\_score | 0.005271 |
| **57** | avg\_prop\_starrating | 0.003903 |

Combinations used:

all\_fea:

* srch\_id
* site\_id
* visitor\_location\_country\_id
* prop\_country\_id
* prop\_id
* prop\_starrating
* prop\_review\_score
* prop\_brand\_bool
* prop\_location\_score1
* prop\_location\_score2
* prop\_log\_historical\_price
* price\_usd
* promotion\_flag
* srch\_destination\_id
* srch\_length\_of\_stay
* srch\_booking\_window
* srch\_adults\_count
* srch\_children\_count
* srch\_room\_count
* srch\_saturday\_night\_bool
* srch\_query\_affinity\_score
* orig\_destination\_distance
* random\_bool
* star\_diff\_bool
* price\_diff\_bool
* visitor\_hist\_starrating\_filled
* visitor\_hist\_adr\_usd\_filled
* willingness\_to\_pay
* star\_diff\_filled
* price\_diff\_filled
* month
* prop\_review\_score\_norm\_srch\_destination\_id
* price\_usd\_norm\_srch\_id
* srch\_query\_affinity\_bins
* star\_diff\_bins
* price\_diff\_bins
* price\_usd\_norm\_srch\_destination\_id
* prop\_location\_score1\_norm\_srch\_destination\_id
* prop\_location\_score2\_norm\_srch\_destination\_id
* prop\_review\_score\_norm\_srch\_id
* prop\_location\_score1\_norm\_srch\_id
* prop\_location\_score2\_norm\_srch\_id
* prop\_desirability\_incomplete
* position\_estimate
* prop\_location\_score\_combined
* prop\_location\_score\_combined\_norm\_srch\_destination\_id
* prop\_location\_score\_combined\_norm\_srch\_id
* price\_usd\_norm\_site\_id
* prop\_location\_score1\_norm\_site\_id
* prop\_location\_score2\_norm\_site\_id
* prop\_location\_score\_combined\_norm\_site\_id
* prop\_review\_score\_norm\_site\_id
* avg\_prop\_price\_usd
* avg\_prop\_location\_score1
* avg\_prop\_location\_score2
* avg\_prop\_location\_score\_combined
* avg\_prop\_review\_score
* avg\_prop\_starrating

> 0.01

* srch\_id
* visitor\_location\_country\_id
* prop\_id
* prop\_location\_score1
* prop\_location\_score2
* prop\_log\_historical\_price
* price\_usd
* srch\_destination\_id
* srch\_length\_of\_stay
* srch\_booking\_window
* srch\_adults\_count
* orig\_destination\_distance
* star\_diff\_filled
* price\_diff\_filled
* month
* prop\_review\_score\_norm\_srch\_destination\_id
* price\_usd\_norm\_srch\_id
* star\_diff\_bins
* price\_usd\_norm\_srch\_destination\_id
* prop\_location\_score1\_norm\_srch\_destination\_id
* prop\_location\_score2\_norm\_srch\_destination\_id
* prop\_review\_score\_norm\_srch\_id
* prop\_location\_score1\_norm\_srch\_id
* prop\_location\_score2\_norm\_srch\_id
* prop\_desirability\_incomplete
* position\_estimate
* prop\_location\_score\_combined
* prop\_location\_score\_combined\_norm\_srch\_destination\_id
* prop\_location\_score\_combined\_norm\_srch\_id
* price\_usd\_norm\_site\_id
* prop\_location\_score1\_norm\_site\_id
* prop\_location\_score2\_norm\_site\_id
* prop\_location\_score\_combined\_norm\_site\_id
* prop\_review\_score\_norm\_site\_id
* avg\_prop\_price\_usd
* avg\_prop\_location\_score1
* avg\_prop\_location\_score2
* avg\_prop\_location\_score\_combined

> 0.02

* srch\_id
* prop\_id
* prop\_location\_score2
* prop\_log\_historical\_price
* price\_usd
* srch\_destination\_id
* srch\_booking\_window
* orig\_destination\_distance
* price\_diff\_filled
* prop\_review\_score\_norm\_srch\_destination\_id
* price\_usd\_norm\_srch\_id
* star\_diff\_bins
* price\_usd\_norm\_srch\_destination\_id
* prop\_location\_score2\_norm\_srch\_destination\_id
* prop\_review\_score\_norm\_srch\_id
* prop\_location\_score1\_norm\_srch\_id
* prop\_location\_score2\_norm\_srch\_id
* prop\_desirability\_incomplete
* position\_estimate
* prop\_location\_score\_combined
* prop\_location\_score\_combined\_norm\_srch\_destination\_id
* prop\_location\_score\_combined\_norm\_srch\_id
* price\_usd\_norm\_site\_id
* prop\_location\_score1\_norm\_site\_id
* prop\_location\_score2\_norm\_site\_id
* avg\_prop\_price\_usd
* avg\_prop\_location\_score2
* avg\_prop\_location\_score\_combined

> 0.03

* srch\_id
* srch\_booking\_window
* orig\_destination\_distance
* price\_usd\_norm\_srch\_id
* star\_diff\_bins
* price\_usd\_norm\_srch\_destination\_id
* prop\_review\_score\_norm\_srch\_id
* prop\_location\_score1\_norm\_srch\_id
* prop\_location\_score2\_norm\_srch\_id
* prop\_desirability\_incomplete
* position\_estimate
* prop\_location\_score\_combined\_norm\_srch\_id
* prop\_location\_score1\_norm\_site\_id

4max(inf)

* prop\_desirability\_incomplete
* prop\_location\_score2\_norm\_srch\_id
* position\_estimate
* srch\_id

4max#2

* prop\_desirability\_incomplete
* price\_usd\_norm\_srch\_id
* srch\_id
* prop\_location\_score2\_norm\_srch\_id