DA2 Assignment 2 - Barcelona Hotel Ratings
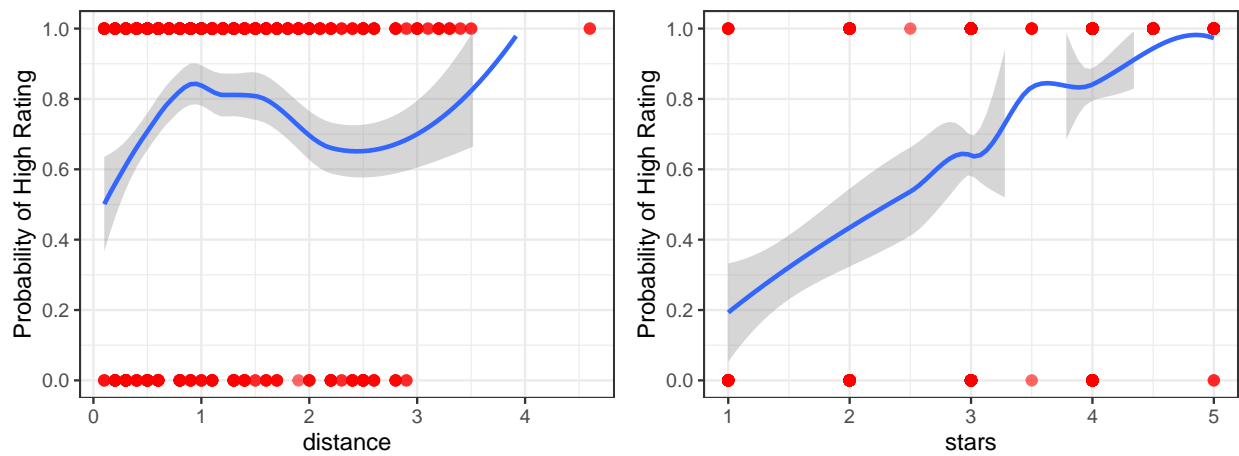
Data

Data Summary

Table 1: Descriptive statistics

	Mean	Median	SD	Min	Max	P05	P95	N
High or Low Rating (1/0)	0.74	1.00	0.44	0.00	1.00	0.00	1.00	674
Avg. rating	4.10	4.10	0.40	2.20	5.00	3.50	4.60	674
Price	352.17	288.00	305.94	52.00	2580.00	71.65	861.70	674
Ln Price	5.50	5.66	0.88	3.95	7.86	4.27	6.76	674
Distance from center	1.19	1.00	0.80	0.10	4.60	0.20	2.80	674
Stars	3.51	4.00	0.96	1.00	5.00	2.00	5.00	674
Number of nights	2.46	1.00	1.50	1.00	4.00	1.00	4.00	674

Regression exploration and findings

	Model 1	Model 2	Model 3	Model 4	Model 5
Constant	−2.222**	−17.649**		−10.125**	
	(0.427)	(3.145)		(1.756)	
stars	0.146**	0.838**	0.121**	0.501**	0.125**
	(0.018)	(0.120)	(0.021)	(0.069)	(0.015)
Distance under 1 mile	0.164*	1.067*	0.153*	0.603*	0.151*
	(0.075)	(0.461)	(0.068)	(0.268)	(0.066)
Distance 1 to 2 miles	−0.059	−0.296	−0.043	−0.188	−0.047
	(0.060)	(0.412)	(0.059)	(0.235)	(0.059)
Distance above 2 miles	0.014	0.049	0.007	0.045	0.011
	(0.050)	(0.456)	(0.066)	(0.256)	(0.064)
Log price below 1st spline	0.506**	3.323**	0.478**	1.896**	0.474**
	(0.096)	(0.696)	(0.111)	(0.390)	(0.093)
Log price 1st to 2nd spline	−0.543**	−4.396**	−0.632**	−2.418**	−0.605**
	(0.102)	(0.863)	(0.139)	(0.480)	(0.115)
Log price above 2nd spline	0.190**	2.030**	0.292**	1.079**	0.270**
	(0.050)	(0.532)	(0.082)	(0.292)	(0.071)
Num.Obs.	674	674	674	674	674

* p < 0.05, ** p < 0.01

Regression Models

Difference in model predictions