



Predicting the cost of a plane ticket

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Website

Seattle (SEA) to Los Angeles (LAX) Fri, Oct 11 1 Traveler ♥ 🔎

Select your departure to Los Angeles Fri, Oct 11

Prices are one way per person, include all taxes and fees, but do not include baggage fees.

Sort & Filter

Tue, Oct 8	Wed, Oct 9	Thu, Oct 10	Fri, Oct 11	Sat, Oct 12	Sun, Oct 13	Mon, Oct 14
			\$325	\$281	\$210	\$215

Expedia Bargain Fare
Get the flight now and flight details after booking. This is a special fare with restrictions. Look for details in checkout. Airline and flight time revealed after purchase.

\$152 one way Select

3:30pm - 8:04pm 4h 34m (1 stop) Select
4 left at \$325 one way

→ Spirit Airlines SEA - 49m in LAS - LAX

Fair Flights (5.2/10)

Departure Airport	Seattle SEA
Arrival Airport	Los Angeles LAX
Flight Date	Fri, Oct. 11
Departure Time	3:30pm
Arrival Time	8:04pm
Duration	4h 34m
Stops	1 stop
Airline	Spirit Airlines
Price	\$325



Methodology

How do these features affect the price of a ticket?

Could I build a model that would predict the price?

- Web Scraping with Selenium
- Linear Regression modeling





Atlanta



Los Angeles



San Francisco



Dallas



Denver



Seattle



Chicago



New York City

Results

Models Trained:

- Linear Regression
- Ridge Regression
- Polynomial Regression

Linear Regression:

- R-Squared Value: 0.548



Mean Absolute Error

Actual Prices	Predicted Prices	Absolute Value of Differences	Mean Absolute Error
0 414	0 402.564046	0 11.435954	
1 356	1 286.248303	1 69.751697	
2 214	2 340.551094	2 126.551094	≈ \$116
3 376	3 384.750192	3 8.750192	
4 336	4 286.390550	4 49.609450	

Mean: \$391

Min: \$88

Max: \$1486



Future Work

- Improve model
- Add more features
- How much do these features affect the price of a ticket?



Questions

