



Airline



FLIGHT PRICE PREDICTION



AUTHOR:

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BOARDING PASS

- FLIGHT
MSIA
- GATE
AVC
- SEAT
FLASK



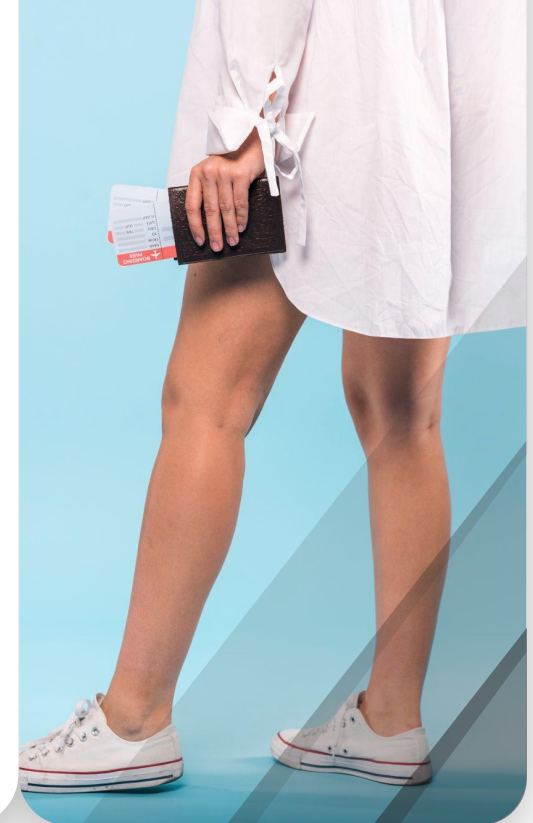


Airline




BOARDING PASS

Motivation



WEB APP DEMO



Airline	Departure_Time	Source_City	Destination	#_Stops	Flight_class	Duration	Days_Left	Current_Price
SpiceJet	07:00 PM	Delhi	Chennai	4	Economy	8.5h	5	4378

Airline:

AirAsia

Departure Time:

07:00 PM

Source City:

Mumbai

Destination City:

Kolkata

Stops:

Zero

Flight Class:

Economy

Duration(h):

Duration in hour

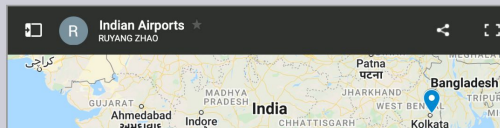
Days Left:

Days Left

Current Price:

Current Price

Predict





Airline



Data

30K Flight Records

Timestamp
Airline
Source/Destination
....
Class

Query:

- User ID
- Model Output

Store:

- Raw User Input
- Model Output



Amazon
RDS

User Input

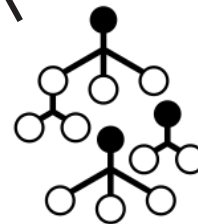


Raw

Model Input

Predictions

Model



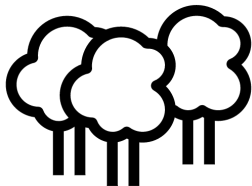


Airline



MODEL (Online)

RANDOM FOREST



- Features: One-hot Encoding
- Hyperparameters: Cross Validation
- Model Performance: Held-out Set



GOAL: **MAPE < 10%**
ACHIEVED: **MAPE \approx 5%**

BOARDING PASS

• **FLIGHT**
MSIA

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Airline



Interesting Insight

- Buying early is not the best strategy.
- Sharp drop close to departure time.

Forecast





Airline

Thank You for Listening!



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