

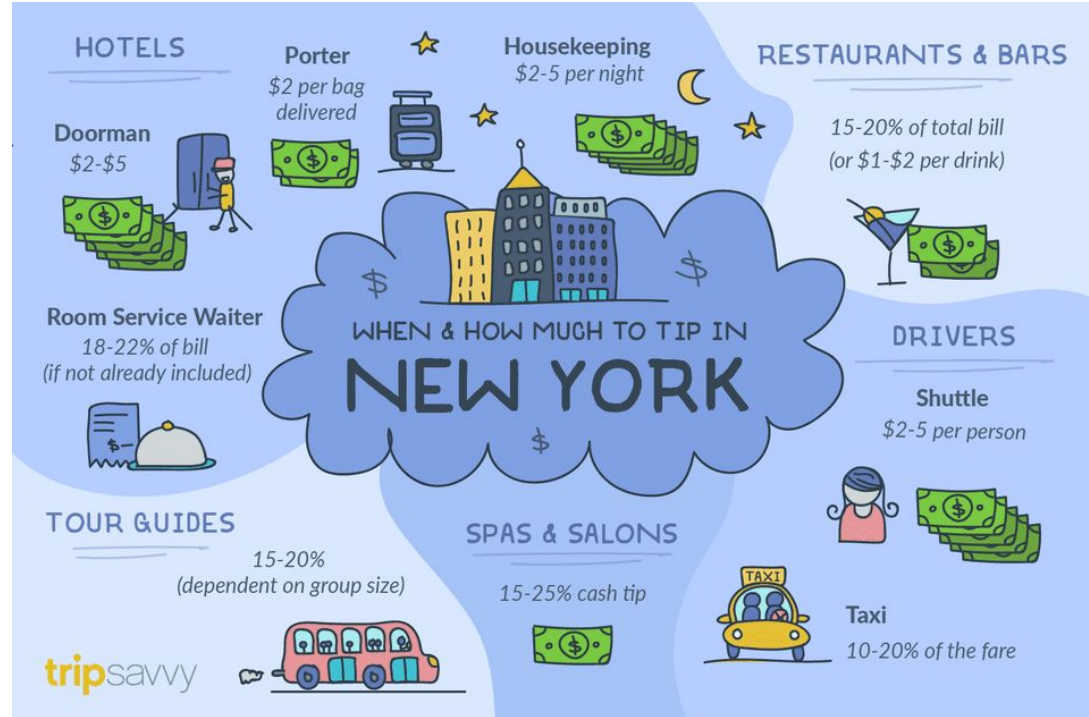


Finding Good Tips For NYC Yellow Taxi Drivers

George Lin

What is a good tip?

- 25% of the fare amount



The Data

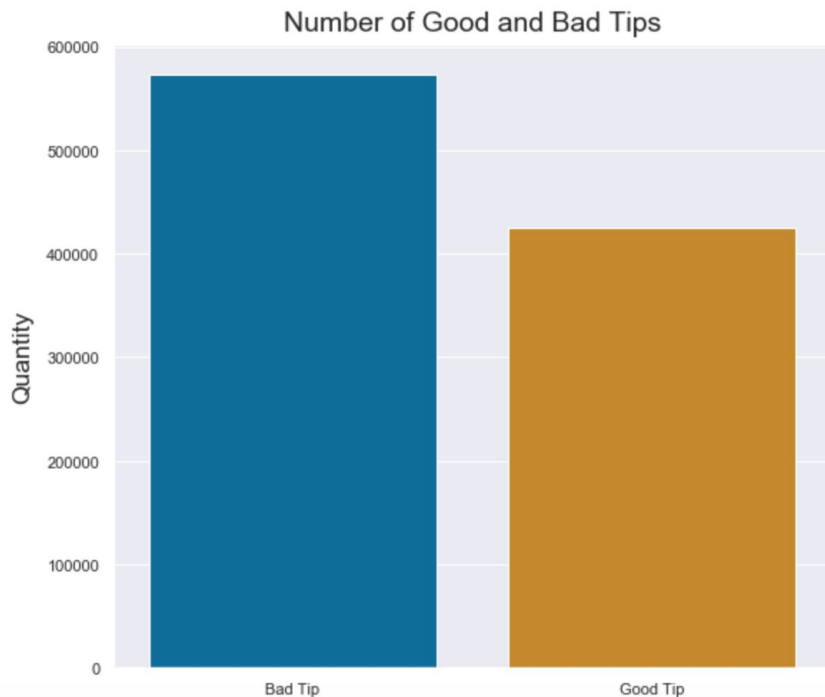
- Yellow Taxi data from April 2019 from the NYC Taxi and Limousine Commission (TLC)
- Contains pickup/dropoff times and location, distance, payment type, tip amount, fare amount, etc.

Random Forest Model

- **Accuracy:** 0.953
- **F1 Score:** 0.945

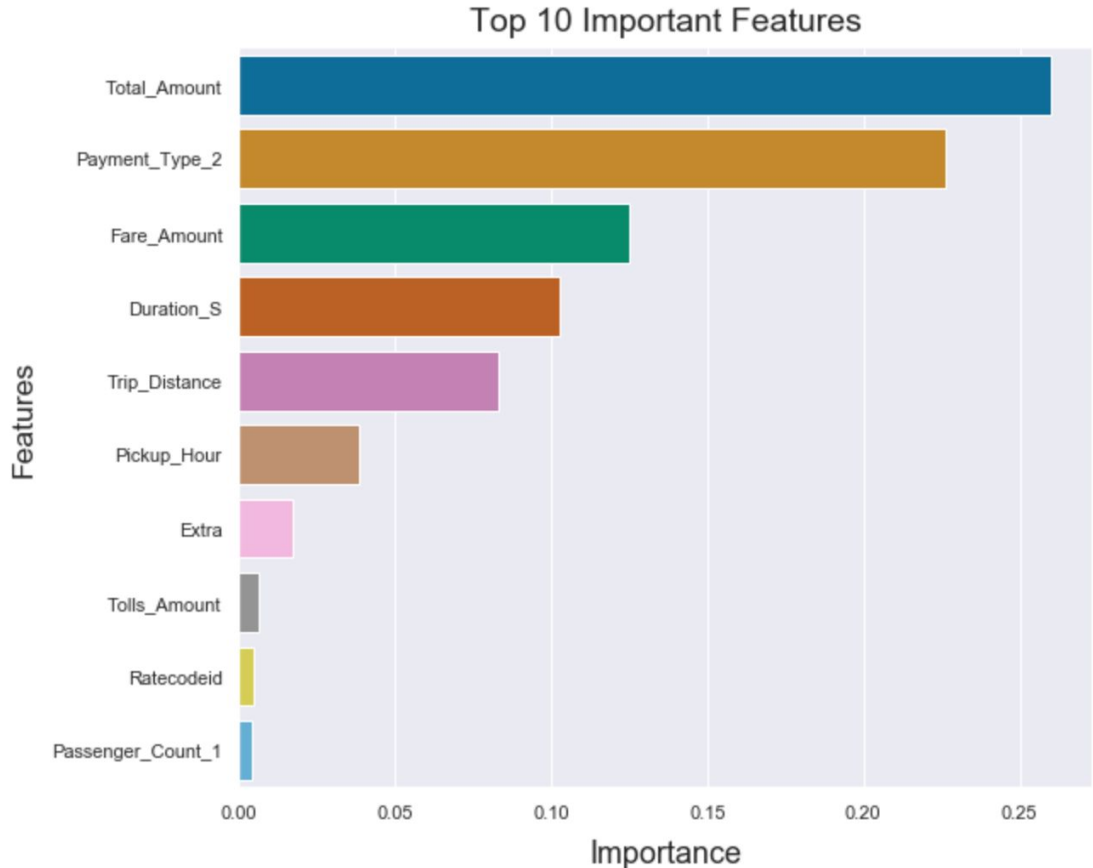
Logistic Regression Model

- **L2 Penalty**
 - **Accuracy:** 0.799
 - **F1 Score:** 0.803
- **L1 Penalty**
 - **Accuracy:** 0.912
 - **F1 Score:** 0.903



What's Important

- “Where to?”
- How they are important requires more analysis
 - Ex: Higher total = more good tips or more bad tips?



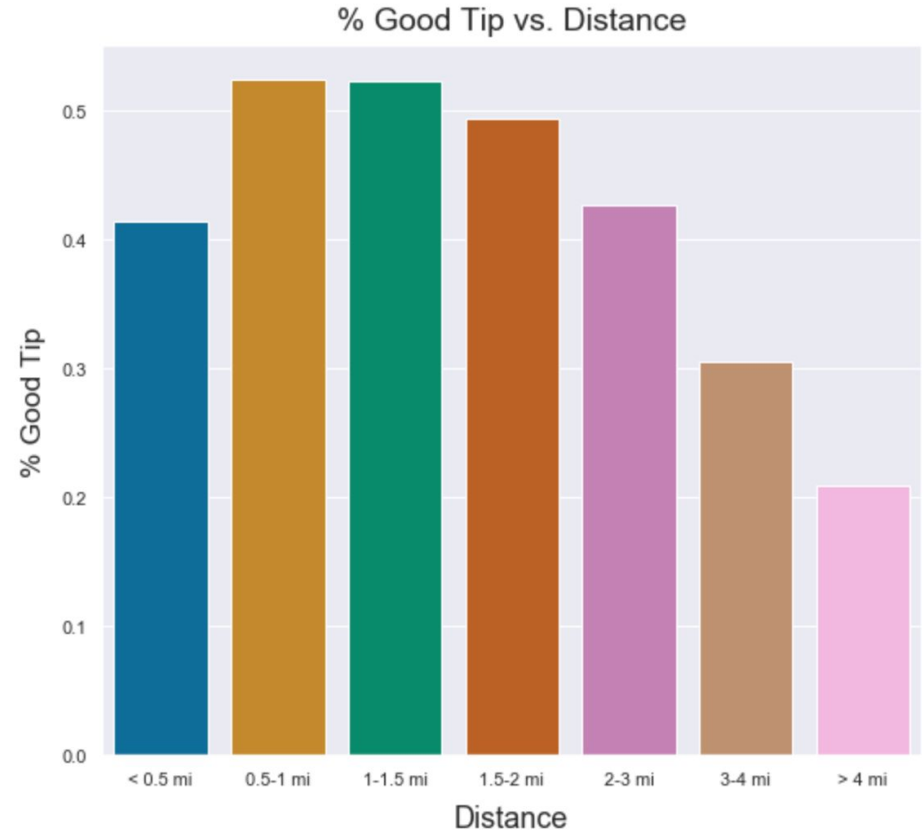
Tips Depending on Total Cost

- Cutoff of about \$4 for a good tip
- Afterwards:
 - 43% are good tips
 - 57% are bad tips
- Low totals may be from going down a few blocks



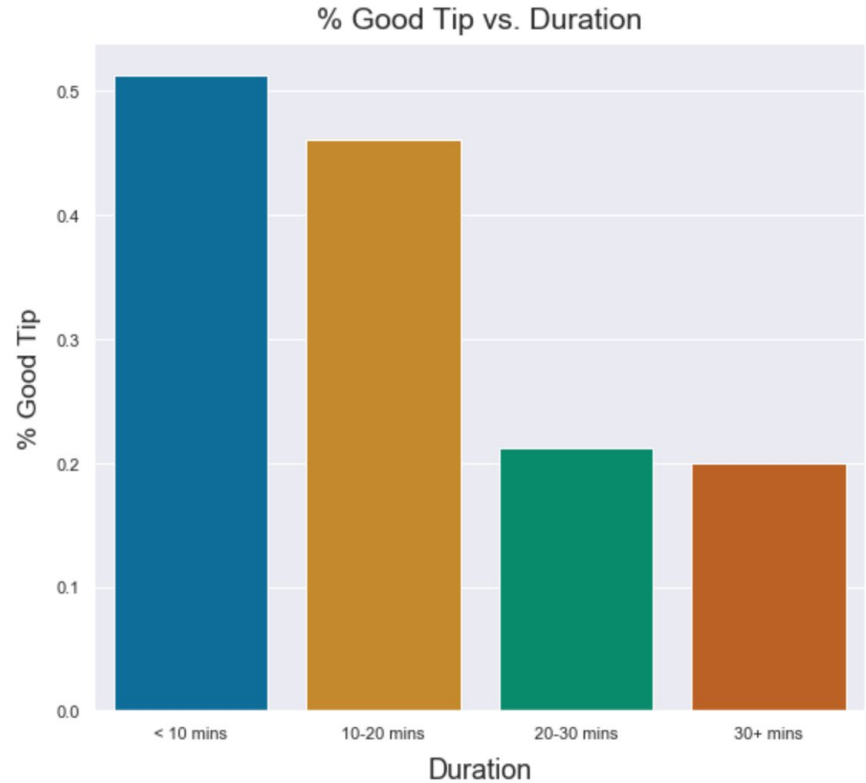
Distance

- Higher chance of a good tip within a certain shorter distance
- Avoid trips that are too short or too long



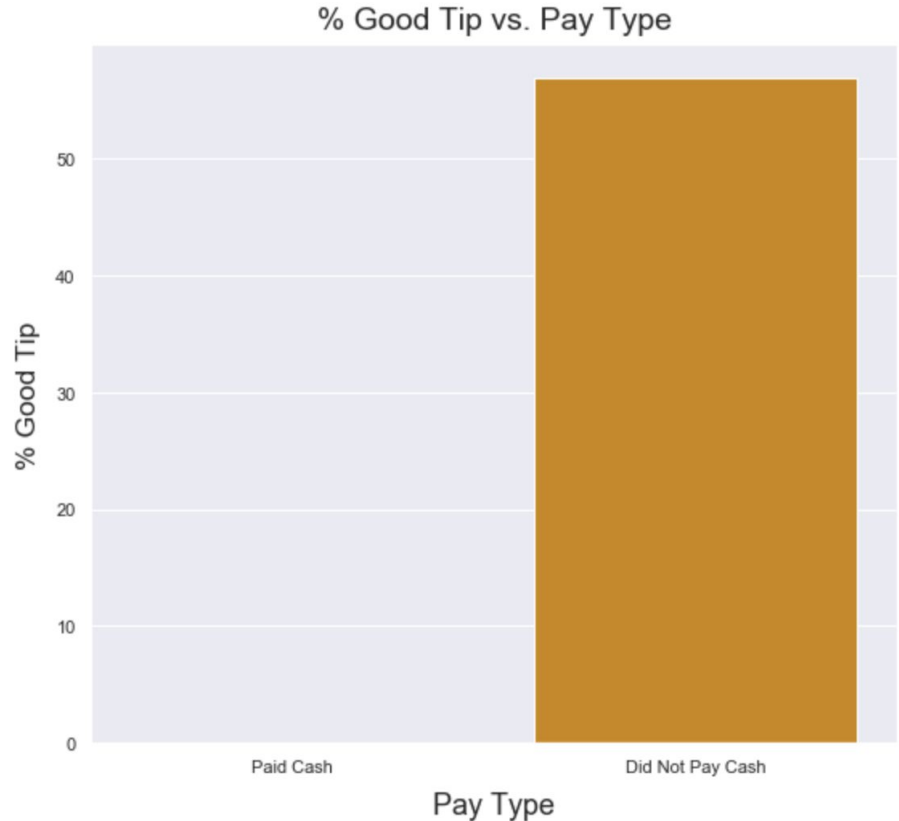
Duration

- The longer the trip, the less likely you will get a good tip
- Avoid traffic



Pay Type

- More likely to give a good tip than not if not paid in cash
- Can't make any inferences from people who pay in cash



Conclusion

- Avoid trips that are too short or too long
- Avoid traffic to make the trip as fast as possible
- More likely than not to get a good tip when the passenger doesn't pay in cash