Introduction

- ★ My connection to the project
  - ○ Annual Passholder at WDW
  - ○ Avid Theme park attendee
- ★ Dataset created by Lynne Passanisi on [Data.world](#)
- ★ Data from 2018
  - ○ New rides have since been opened
- ★ Rides from all 4 Parks
  - ○ Magic Kingdom
  - ○ Hollywood Studios
  - ○ Animal Kingdom
  - ○ Epcot

Introduction cont...

COLUMNS (27 in total)

★ Ride Name
★ Location (2 columns)
★ Ride Features (9 columns)
★ Fastpass Availability
★ "Classic" Ride Designation
★ Targeted Riders' Age Group (5 columns)
★ Height Requirement
★ Ride Duration
★ Age of Ride (4 columns)
★ Ranking of Ride (via Travel & Leisure)
★ Star Rating (via Trip Advisor)

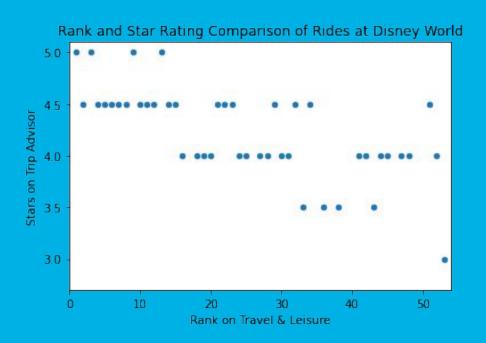➢ What features of a ride or attraction affect the star rating?

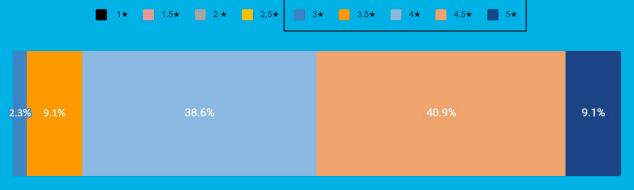➢ AKA what makes a ride "*great*" rather than good.

DATA VISUALIZATIONS

Rank of ride is not 100% correlated with star rating
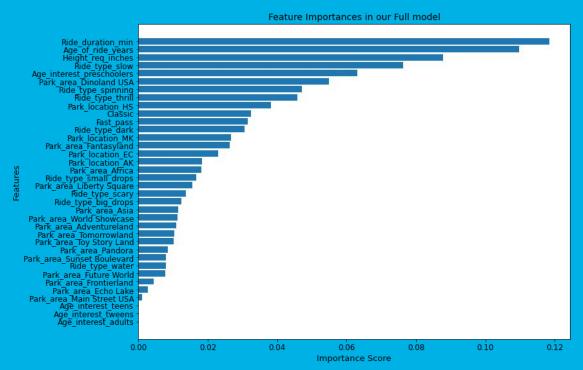
Rank and Star Rating Comparison of Rides at Disney World

DATA VISUALIZATIONS

Feature Importances in our Full model

★ This chart shows the many features of our dataset

★ This is a ranking of how important each feature is to the model: i.e. how much does it actually affect the outcome?

★ High importance = more weight

★ Notice that some features had a score of 0

○ These were not included in the final model

XGBOOST

The Chosen Model

MODEL EVALUATION

★ Baseline Accuracy **53%**
  ○ A baseline accuracy is if we guessed that everything was the majority option (lower starred rides).
★ The model predicted that **10/15** of the rides were low starred, when only **8/15** were
  ○ The model performs better for low-starred rides
    ■ It correctly identified about **88%** of what was low starred
  ○ Only slightly better than baseline in differentiating high starred rides
    ■ Identified **~57%** of the high starred rides correctly
  ○ Overall accuracy of **73%**

RECOMMENDATIONS

★ **Expand the data set**
  ○ more data (more rides) = can drastically improve this model!
    ■ Update to 2021/2022
    ■ Add rides from other popular amusement parks
★ For a successful/higher rated ride
  ○ Avoid slower rides
  ○ Avoid spinning rides
  ○ Increase thrill rides

CREDITS

Presentation by...   **Mandy Sachs**

Email…   **mandy.sachs@gmail.com**

Professional Profile...   **Linkedin**

Portfolio…   **Github**